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TABULATIONS OF STATIC PRESSURE COEFFICIENTS ON THE
SURFACES OF THREE PYLON-MOUNTED AXISYMMETRIC FLOW-
THROUGH NACELLES AT MACH NUMBERS FROM 0.40 TO 0.98

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INTRODUCTION

Many commercial subsonic transport aircraft designs incorporate fuel-efficient high-bypass-ratio turbofan engines pylon-mounted beneath the wings. This is done for practical considerations such as simplicity and maintenance accessibility and it is likely this installation approach will be continued. However, as the use of higher thrust and higher-bypass-ratio turbofan engines increased, nacelle diameters became larger so that ground clearance (with a reasonable landing gear length for aircraft takeoff rotation) diminished. To compensate for diminishing ground clearances, pylons were shortened and nacelles were placed closer to the wing lower surface. At some point however, proximity of the nacelle to the wing lower surface begins to adversely affect the drag of the configuration due to mutual flow field interference. To alleviate this problem the nacelle can be moved forward relative to the wing so that the nacelle maximum diameter is further ahead of the wing leading edge. By necessity this results in nacelles protruding well ahead of the wing, mounted on highly swept pylons. Practical considerations such as weight, aeroelastic effects, and cost suggest that the pylon be as short as possible, and that the nacelle be positioned as close to the wing leading edge as possible without producing significant adverse aerodynamic interference effects.

Analytic computational codes that are being developed to predict the flow field around combinations of aerodynamic components in the lower transonic speed range show promise as screening tools for

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selection of nacelle locations at an early design stage. To establish confidence and to evaluate the accuracy and usefulness of such codes, it is desirable to compare computational results with detailed experimental measurements wherever possible. To this end surface pressure coefficient tabulations for three flow-through nacelles mounted on an 82° swept pylon having a 10-percent thickness-to-chord ratio are presented in this paper. The long pylon was supported from a small body of revolution so that the static pressure measurements made on the nacelle and pylon surfaces represent the pylon-nacelle flow field without a wing flow field. Two nacelles had NACA 1-85-100 inlets and different circular arc afterbodies. The third nacelle had an NACA 1-70-100 inlet with a circular arc afterbody having the same external shape as one of the other afterbodies. The nacelle length-to-maximum diameter ratio was 3.5 for all the nacelles.

The tests were conducted in the Langley 16-Foot Transonic Tunnel at Mach numbers from 0.40 to 0.98 and at angles of attack from -2° to 8° at selected Mach numbers. Nacelle external surface static pressures were measured at meridian angles of 45° , 90° , 180° , and 330° . Two streamwise rows of pylon surface static pressures were also measured.

SYMBOLS

A	duct cross-sectional area
c	pylon chord, 44.450 cm
d	diameter
L	total nacelle length, 40 cm
l_a	length of circular arc afterbody portion of nacelle, 22.860 cm
l_B	streamwise length coordinate of balance fairing
l_F	length of NACA 1-series inlet portion of nacelle, 11.430 cm
M	Mach number
\dot{m}/\dot{m}_∞	nacelle internal mass-flow ratio, $\frac{1}{\rho_\infty A_h V_\infty} \int \rho_e V_e dA$
p	static pressure
q	dynamic pressure
R	circular arc radius of nacelle afterbody boattail
R_d	Reynolds number based on maximum diameter of nacelle
R_i	circular arc radius of nacelle afterbody interior
r	radial dimension to external surface from centerline of nacelle or balance fairing
r_i	radial dimension to internal surface from centerline of nacelle
r_{lip}	radius of internal portion of inlet lip
T_t	stagnation temperature
V	velocity
X	axial coordinate from nacelle inlet lip
x	axial coordinate from leading-edge of pylon
y	pylon half-thickness coordinate

z	distance from nacelle center line to pylon streamwise chord plane
α	angle of attack with respect to nacelle center line, deg
β	terminal angle of afterbody boattail, deg
β_c	chord angle of afterbody boattail, deg
ρ	density
ϕ	meridian angle, measured from top of model in clockwise direction when model viewed from the front, deg

Subscripts

b	base of afterbody
e	nacelle exit
f	internal cylindrical portion of inlet
h	most forward point on inlet lip
l	local
m	maximum
p	base of mass-flow throttle plug
∞	free-stream condition

Column Headings and Symbols on Data Tabulations

CP	pressure coefficient, $\frac{P_l - P_\infty}{q_\infty}$
I	indicates defective pressure orifice
LOWER	row of pressure orifices on pylon closest to nacelle
ML	local Mach number
PHI	meridian angle of row of nacelle pressure orifices, (0° at top of nacelle, angles measured in clockwise direction when model viewed from the front)
UPPER	row of pressure orifices on pylon furthest from nacelle
X/C	streamwise distance of pylon pressure orifice from pylon leading edge ratioed to pylon chord length
X/L	streamwise distance of nacelle pressure orifice from nacelle lip ratioed to nacelle length ($X/L = -.100$ in data tabulations indicates an internal nacelle surface orifice at a true $X/L = 0.006$), see table I.
45,90,180,330	angular locations (PHI) of rows of nacelle pressure in degrees

MODEL

All nacelle configurations had a fineness ratio (L/d_m) of 3.5 with a maximum diameter of 11.43 cm. The nacelles were mounted on a long 10-percent-thick pylon with a leading-edge sweep angle of 82° . The nacelle-pylon combination was attached to a fairing which housed a force balance as shown in the model schematic (fig. 1) and photographs (fig. 2). Sketches of the six model configurations are presented in figure 3 with nondimensionalized geometric parameters. The nacelles had rows of surface static pressure orifices at four meridian angles as listed in table I. The pylon had two chordwise rows of pressure orifices located as listed in table II. The pylon leading and trailing edges were removable so that pressure tubes from the nacelle and pylon could be routed internally. At the junction of the pylon and balance fairing, the pressure tubes became external and were routed above and below the balance fairing (see fig. 2).

Although six model configurations are described in figure 3, it should be noted that there were only three different nacelle shapes. Configurations 1 through 4 had the same nacelle shape and differed only internally where throttle plugs could be mounted to vary mass flow.

Inlets

Two NACA 1-series inlets having a length ratio (l_F/d_m) of 1.0 were investigated. An NACA 1-85-100 inlet ($d_h/d_m = 0.85$) was interchangeable on two afterbodies and was used on configurations 1 through

5 (see fig. 3). An NACA 1-70-100 inlet ($d_h/d_m = 0.70$) with a smaller internal diameter was used on configuration 6 only. Nondimensionalized nacelle internal and external coordinates are presented in table III. Generalized NACA 1-series inlet coordinates can be found in reference 1.

Afterbodies

Three circular arc afterbodies having a boattailed length ratio (l_a/d_m) of 2.0 were investigated. One afterbody (for configurations 1 through 3) with a base to maximum diameter ratio (d_b/d_m), of 0.859 had provision for mounting throttle plugs inside to vary mass flow (exit area) while afterbody external geometry remained unchanged. In addition, a solid disc could be mounted internally in this same afterbody to produce a configuration (4) with no internal flow. The other two afterbodies had identical external geometry ($d_b/d_m = 0.709$) but differed internally so that each could mount a different inlet (configurations 5 and 6). Afterbody internal and external coordinates are included in table III.

Pylon

The pylon had 10-percent-thick constant-chord (44.450 cm) supercritical airfoil sections parallel to the nacelle center line. Small filler pieces fit at the nacelle end of the pylon to permit mounting the different inlet and afterbody configurations. Some slight compromises in pylon thickness (figs. 1(b) and 1(c)) were necessary at the nacelle-pylon juncture aft of the pylon maximum thickness for

attachment considerations. The basic pylon airfoil coordinates are given in table IV. For the pylon-only model configuration (no nacelle mounted) a filler was attached to replace the nacelle fig. 1(d). The bottom of the filler (which extended pylon surface lines down to a plane 4.76 cm above the nacelle centerline location) was flat.

Balance Fairing

The balance fairing served as a shield for the force balance and as an attachment point for the nacelle-ptylon combination. The coordinates of the basic balance fairing are presented in table IV. To mount the pylon to the balance fairing, the forward lower portion of the fairing was removed to provide a flat mounting surface. See figure 1(a). The pylon-balance fairing juncture was filled and hand faired for smoothness.

WIND TUNNEL

The investigation was conducted in the Langley 16-Foot Transonic Tunnel which is a single-return atmospheric wind tunnel with continuous air exchange. The test section is octagonal in shape with 4.724 meters between opposite walls (area equivalent to a circle having a diameter of 4.85 meters) and has axial slots at the wall vertices. The total width of the eight slots in the vicinity of the model is approximately 3.7 percent of the test section perimeter. The results of the test section blockage investigation of reference 2 indicate that all configurations tested herein, except configuration 4, had small enough blockage ratios so that there would be negligible effects of blockage on drag coefficient at Mach numbers through 0.98. At a Mach number of 0.98 configuration 4 which had a blockage ratio of 0.063 percent would be the only configuration to encounter measurable blockage effects so those data are not presented. More complete information on the tunnel airflow characteristics is contained in reference 3. The tunnel sting support system pivots in such a manner that the model remains on or near the test section centerline through the angle of attack range.

TESTS

Each configuration was tested at Mach numbers from 0.40 to 0.98 and at angles of attack from -2° to 8° at selected Mach numbers. The data for a given nacelle configuration were obtained in two separate tunnel tests. First, nacelle mass flow was determined using a pylon mounted rake (total and static pressure probes) to survey the flow at the nacelle exit plane. Then, with the exit survey rake removed, nacelle and pylon surface static pressures were measured. No data are presented at Mach number 0.98 for configuration 4 since the results of reference 2 indicate the possibility of measurable tunnel blockage effects.

The variations of freestream stagnation temperature and Reynolds number (based on maximum nacelle diameter) with Mach number are shown in figure 4. Boundary layer transition on the inlet external surface was artificially fixed by means of a 0.125 cm wide strip of number 120 silicon carbide particles 1.8 cm aft of the inlet lip. The boundary layer transition strips on the inlet internal surface (located 1.8 cm aft of the inlet lip) and on the pylon surface (1.8 cm stream-wise aft of the leading edge) consisted of number 100 silicon carbide particles. The transition strip on the force balance fairing was 1.8 cm aft of the nose and consisted of number 120 silicon carbide particles.

Model angle of attack has been corrected for deflection of the sting and force balance due to aerodynamic forces and moments and for tunnel stream angularity. No corrections were made to the pressure

data for test section wall interference effects or for local condensation effects that might have occurred in the model flow field.

PRESENTATION OF RESULTS

The data, which consist of local static pressure coefficients and Mach numbers on the nacelle and pylon, are presented in tabular form assembled from computer listings. The definitions of the column headings and information which appears within tables V through XI can be found in the SYMBOLS section of this paper under the subsection entitled "Column Headings and Symbols on Data Tabulations." The free-stream Mach number, model angle of attack, and nacelle mass-flow ratio at which each data point was obtained are listed above each tabulation. Nominally the nacelle mass-flow ratios, based on inlet highlight area, were as follows: configuration 1, 0.95; configuration 2, 0.82; configuration 3, 0.68; configuration 4, 0; configuration 5, 0.64; and configuration 6, 0.95.

The data are presented in the tables as indicated on the following page.

Nominal M_∞	Nominal α	Configuration						
		1 Table V	2 Table VI	3 Table VII	4 Table VIII	5 Table IX	6 Table X	Pylon only Table XI
0.40	-2	(a)	(a)	(a)	(a)	(a)	(a)	(a)
	0	(b)	(b)	(b)	(b)	(b)	(b)	
	2	(c)	(c)	(c)	(c)	(c)	(c)	
	4	(d)	(d)	(d)	(d)	(d)	(d)	
	8	(e)	(e)	(e)	(e)	(e)	(e)	
0.60	0	(f)	(f)	(f)	(f)	(f)	(f)	(b)
0.70	0	(g)	(g)	(g)	(g)	(g)	(g)	(c)
0.80	-2	(h)	(h)	(h)	(h)	(h)	(h)	(d)
	0	(i)	(i)	(i)	(i)	(i)	(i)	
	2	(j)	(j)	(j)	(j)	(j)	(j)	
	4	(k)	(k)	(k)	(k)	(k)	(k)	
	8	(l)	(l)	(l)	(l)	(l)	(l)	
0.85	0	(m)	(m)	(m)	(m)	(m)	(m)	(e)
0.90	-2	(n)	(n)	(n)	(n)	(n)	(n)	(f)
	0	(o)	(o)	(o)	(o)	(o)	(o)	
	2	(p)	(p)	(p)	(p)	(p)	(p)	
	4	(q)	(q)	(q)	(q)	(q)	(q)	
	8	(r)	(r)	(r)	(r)	(r)	(r)	
0.92	0	(s)	(s)	(s)	(s)	(s)	(s)	(g)
0.94	-2	(t)	(t)	(t)	(t)	(t)	(t)	(h)
	0	(u)	(u)	(u)	(u)	(u)	(u)	
	2	(v)	(v)	(v)	(v)	(v)	(v)	
	4	(w)	(w)	(w)	(w)	(w)	(w)	
	8	(x)	(x)	(x)	(x)	(x)	(x)	
0.96	0	(y)	(y)	(y)	(y)	(y)	(y)	(i)
0.98	-2	(z)	(z)	(z)		(z)	(z)	(j)
	0	(aa)	(aa)	(aa)		(aa)	(aa)	
	2	(bb)	(bb)	(bb)		(bb)	(bb)	
	4	(cc)	(cc)	(cc)		(cc)	(cc)	
	8	(dd)	(dd)	(dd)		(dd)	(dd)	

REFERENCES

1. Baals, Donald D.; Smith, Norman F.; and Wright, John B.: The Development and Application of High-Critical-Speed Nose Inlets. NACA Rep. 920, 1948. (Supersedes NACA ACR L5F30a)
2. Couch, Lana M.; and Brooks, Cuyler W., Jr.: Effect of Blockage Ratio on Drag and Pressure Distributions for Bodies of Revolution at Transonic Speeds. NASA TN D-7331, Nov. 1973.
3. Corson, Blake W., Jr.; Runckel, Jack F.; and Igoe, William B.: Calibration of the Langley 16-Foot Transonic Tunnel with Air Removal. NASA TR-423, August 1974.

TABLE I. - NACELLE PRESSURE ORIFICE LOCATIONS

Orifice locations on nacelle internal surface-

X/L	ϕ , deg			
	180	90	45	330
0.006*	✓	✓		

*Labeled as -.100 in pressure coefficient tabulations)

Orifice locations on nacelle external surface-

X/L	ϕ , deg			
	180	90	45	330
0.000	✓			
.008	✓			
.015	✓	✓	✓	✓
.021	✓			
.028	✓			
.034	✓	✓	✓	✓
.042	✓			
.051	✓			
.068	✓	✓	✓	✓
.085	✓			
.102	✓			
.136	✓	✓	✓	✓
.169	✓	✓	✓	✓
.258	✓	✓	✓	✓
.300	✓	✓	✓	✓
.400	✓	✓	✓	✓
.500	✓	✓	✓	✓
.600	✓	✓	✓	✓
.700	✓	✓	✓	✓
.800	✓	✓	✓	✓
.900	✓	✓	✓	✓
.950	✓	✓	✓	✓
.980	✓	✓	✓	✓

TABLE II. - PYLON PRESSURE ORIFICE LOCATIONS

x/c	LOWER ROW	UPPER ROW
0.00	✓	✓
.05	✓	
.10	✓	✓
.15	✓	
.20	✓	✓
.25	✓	✓
.30	✓	✓
.35	✓	✓
.40	✓	✓
.45	✓	✓
.50	✓	✓
.55	✓	
.60	✓	✓
.65	✓	
.70	✓	✓
.75	✓	
.80	✓	✓
.85	✓	
.90	✓	

TABLE III. - NACELLE COORDINATES

Inlet Coordinates for Configurations -				
X/L	1 through 5		6	
	$r_{lip}/r_m = 0.00364$		$r_{lip}/r_m = 0.00733$	
	r/r_m	r_i/r_m	r/r_m	r_i/r_m
0	0.8537	0.8500	0.7073	0.7000
0.0006	.8607		.7214	
0.0011	.8634		.7267	
.0017	.8656		.7311	
.0029	.8688		.7377	
.0043	.8723		.7445	
.0057	.8752		.7504	
.0071	.8779		.7558	
.0084	.8804		.7609	
.0114	.8851		.7702	
.0143	.8893		.7786	
.0200	.8968		.7936	
.0286	.9065		.8131	
.0429	.9200		.8399	
.0571	.9308		.8616	
.0714	.9402		.8804	
.0857	.9486		.8972	
.1000	.9562		.9124	
.1143	.9631		.9261	
.1286	.9692		.9384	
.1429	.9747		.9493	
.1714	.9841		.9681	
.2000	.9916		.9823	
.2286	.9953		.9923	
.2571	.9991		.9982	
.2857	1.0000	↓	1.0000	↓

TABLE III. - CONTINUED

Afterbody Coordinates for Configurations-						
X/L	1 through 4		5		6	
	r/r_m	r_i/r_m	r/r_m	r_i/r_m	r/r_m	r_i/r_m
0.2857	1.0000	0.8500	1.0000	0.8500	1.0000	0.7000
.4286	1.0000		1.0000	.8500	1.0000	
.4444	.9999		.9998	.8499	.9998	
.4762	.9990		.9980	.8490	.9980	
.5079	.9973		.9944	.8471	.9944	
.5396	.9947		.9891	.8444	.9891	
.5714	.9912		.9819	.8406	.9819	
.6032	.9868		.9729	.8360	.9729	
.6349	.9816		.9622	.8304	.9622	
.6667	.9755		.9497	.8240	.9497	
.6984	.9686		.9353	.8166	.9353	
.7302	.9607		.9192	.8083	.9192	
.7619	.9520		.9013	.7990	.9013	
.7937	.9424		.8816	.7888	.8816	
.8254	.9320		.8600	.7777	.8600	
.8571	.9207		.8366	.7657	.8366	
.8889	.9085		.8115	.7527	.8115	
.9206	.8954		.7844	.7388	.7844	
.9524	.8815		.7556	.7240	.7556	
.9841	.8666		.7249	.7082	.7249	
1.0000	.8589	↓	.7089	.7000	.7089	↓

TABLE IV. - PYLON AND BALANCE FAIRING COORDINATES

Pylon Coordinates -

x/c	y/c
0	0
0.0411	0.0210
.0821	.0280
.1232	.0333
.1642	.0380
.2053	.0418
.2464	.0447
.3000	.0477
.3500	.0495
.4000	.0500
.4500	.0495
.5000	.0485
.5500	.0467
.6000	.0438
.6500	.0398
.7000	.0345
.7500	.0290
.8000	.0235
.8500	.0178
.9000	.0120
.9500	.0067
1.0000	.0020

Balance Fairing
Coordinates -

l_B/c	r/c
0	0
0.0023	0.0081
.0046	.0110
.0070	.0131
.0093	.0150
.0115	.0165
.0139	.0178
.0185	.0202
.0231	.0222
.0463	.0296
.0694	.0348
.0926	.0389
.1157	.0422
.1389	.0450
.1620	.0475
.1851	.0497
.2083	.0516
.2314	.0533
.2777	.0562
.3240	.0585
.3703	.0602
.4629	.0626
.5786	.0643
.8171	.0643

TABLE V. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 1

(a) $M_\infty = 0.40$, $\alpha = -2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.076	-.059	.412	.409
0.000	-.052				.408				.05	-.052		.408	
.008	-.162				.429				.10	-.052	-.064	.410	.411
.015	-.156	-.016	.063	.374	.428	.401	.384	.382	.15	-.092		.416	
.021	-.152				.428				.20	-.097	-.094	.418	.417
.028	-.153				.429				.25	-.101	-.093	.418	.417
.034	-.165	-.095	-.041	-.019	.431	.417	.405	.401	.30	-.131	-.096	.424	.417
.042	-.148				.427				.35	-.151	-.097	.428	.417
.051	-.153				.428				.40	-.149	-.112	.428	.420
.058	-.128	-.091	-.040	-.045	.424	.416	.405	.407	.45	-.149	-.103	.428	.418
.065	-.124				.423				.50	-.146	-.089	.427	.416
.102	-.116				.421				.55	I		I	
.136	-.113	-.093	-.063	-.063	.420	.416	.411	.410	.60	-.084	-.082	.414	.414
.169	-.111	-.103	-.067	-.041	.420	.418	.411	.406	.65	-.064		.410	
.258	-.094	-.085	-.062	-.053	.416	.415	.410	.408	.70	-.060	-.036	.409	.405
.300	-.068	-.063	-.042	-.036	.411	.411	.406	.405	.75	-.060		.410	
.400	-.052	-.062	-.045	-.049	.408	.410	.407	.408	.80	-.060	-.056	.410	.409
.500	-.059	-.060	-.056	-.070	.410	.410	.409	.412	.85	-.057		.409	
.600	-.054	-.062	-.070	-.075	.408	.410	.412	.412	.90	-.055		.408	
.700	-.044	-.063	-.073	-.085	.406	.410	.413	.414					
.800	-.034	-.048	-.059	-.088	.404	.407	.411	.415					
.900	-.009	-.031	-.050	-.063	.400	.404	.408	.410					
.950	.005	-.010	-.028	-.043	.397	.400	.403	.406					
.980	.022	.011	-.005	-.018	.393	.395	.398	.402					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.034	-.031	.404	.404
0.000	.413				.304				.05	-.025		.402	
.008	-.008				.399				.10	-.028	-.032	.403	.404
.015	-.035	-.026	-.025	-.022	.405	.403	.402	.402	.15	-.055		.409	
.021	-.065				.411				.20	-.055	-.049	.409	.408
.028	-.083				.415				.25	-.056	-.041	.409	.406
.034	-.101	-.090	-.093	-.080	.413	.416	.416	.414	.30	-.073	-.045	.412	.407
.042	-.093				.416				.35	-.098	-.044	.418	.406
.051	-.103				.419				.40	-.097	-.053	.418	.408
.068	-.092	-.086	-.070	-.080	.416	.415	.412	.414	.45	-.097	-.049	.418	.408
.085	-.096				.417				.50	-.095	-.039	.416	.406
.102	-.095				.416				.55	I		I	
.136	-.096	-.087	-.077	-.077	.417	.415	.413	.413	.60	-.055	-.039	.409	.406
.169	-.097	-.099	-.075	-.053	.417	.417	.413	.408	.65	-.017		.401	
.258	-.088	-.084	-.065	-.055	.416	.415	.411	.409	.70	-.018	-.017	.402	.401
.300	-.063	-.059	-.042	-.034	.411	.410	.406	.405	.75	-.017		.401	
.400	-.054	-.055	-.040	-.044	.409	.409	.406	.407	.80	-.018	-.017	.402	.401
.500	-.058	-.054	-.051	-.052	.410	.408	.408	.410	.85	-.008		.399	
.600	-.055	-.056	-.060	-.070	.409	.409	.411	.412	.90	-.009		.399	
.700	-.048	-.057	-.060	-.079	.407	.409	.411	.413					
.800	-.039	-.040	-.060	-.065	.405	.406	.410	.415					
.900	-.018	-.024	-.040	-.060	.402	.403	.406	.410					
.950	-.001	-.003	-.021	-.040	.393	.398	.402	.405					
.980	.019	.016	.000	-.012	.394	.395	.398	.402					

TABLE V. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.028	-.029	.403	.403
0.000	.687				.226				.05	-.024		.403	
.008	.144				.367				.10	-.026	-.030	.403	.404
.015	.089	-.027	-.102	-.127	.379	.403	.418	.423	.15	-.050		.408	
.021	.032				.391				.20	-.048	-.035	.407	.405
.028	-.006				.399				.25	-.047	-.034	.407	.405
.034	-.028	-.089	-.135	-.139	.403	.415	.425	.426	.30	-.050	-.033	.407	.405
.042	-.042				.406				.35	-.081	-.034	.414	.405
.051	-.055				.409				.40	-.079	-.033	.414	.405
.068	-.057	-.087	-.103	-.109	.409	.415	.418	.420	.45	-.079	-.033	.413	.404
.085	-.062				.410				.50	-.079	-.031	.413	.404
.102	-.068				.411				.55	I		I	
.136	-.074	-.096	-.093	-.094	.413	.417	.416	.416	.60	-.044	-.030	.406	.404
.169	-.083	-.103	-.085	-.067	.414	.418	.415	.411	.65	-.012		.400	
.258	-.083	-.085	-.067	-.060	.415	.415	.411	.410	.70	-.015	-.015	.401	.401
.330	-.061	-.059	-.043	-.037	.410	.409	.406	.405	.75	-.002		.398	
.400	-.049	-.055	-.041	-.040	.407	.409	.406	.405	.80	-.002	-.007	.398	.399
.500	-.058	-.053	-.049	-.053	.409	.409	.408	.409	.85	-.003		.399	
.630	-.056	-.054	-.057	-.060	.409	.409	.409	.410	.90	-.002		.398	
.700	-.053	-.056	-.063	-.071	.408	.409	.410	.412					
.800	-.042	-.044	-.054	-.070	.406	.406	.409	.412					
.900	-.021	-.029	-.040	-.050	.402	.404	.406	.408					
.950	-.004	-.008	-.019	-.034	.398	.399	.402	.404					
.980	.015	.013	.001	-.010	.395	.395	.397	.400					

(d) $M_\infty = 0.40$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.043	-.024	.406	.403
0.000	.837				.171				.05	-.018		.401	
.008	.281				.236				.10	-.020	-.028	.402	.404
.015	.187	-.020	-.193	-.237	.358	.401	.434	.444	.15	-.039		.406	
.021	.117				.373				.20	-.038	-.023	.405	.403
.028	.073				.383				.25	-.037	-.013	.405	.400
.034	.041	-.091	-.174	-.202	.389	.416	.432	.437	.30	-.041	-.012	.406	.400
.042	.021				.393				.35	-.061	-.013	.409	.400
.051	-.002				.397				.40	-.050	-.015	.410	.401
.068	-.008	-.092	-.123	-.142	.399	.416	.423	.426	.45	-.059	-.013	.410	.401
.085	-.031				.404				.50	-.052	-.012	.408	.400
.102	-.039				.406				.55	I		I	
.136	-.054	-.097	-.105	-.109	.408	.417	.419	.420	.60	-.025	-.019	.403	.402
.169	-.063	-.114	-.097	-.074	.410	.421	.417	.412	.65	-.008		.399	
.258	-.074	-.094	-.073	-.062	.412	.417	.412	.410	.70	-.007	-.003	.399	.398
.330	-.052	-.067	-.047	-.038	.408	.412	.407	.405	.75	.002		.397	
.400	-.047	-.065	-.039	-.040	.407	.411	.405	.405	.80	.001	-.004	.397	.398
.500	-.054	-.062	-.045	-.046	.409	.410	.407	.407	.85	.004		.397	
.630	-.057	-.062	-.055	-.057	.409	.410	.409	.409	.90	.004		.397	
.700	-.051	-.063	-.058	-.062	.408	.411	.410	.410					
.800	-.046	-.049	-.053	-.065	.407	.408	.408	.411					
.900	-.026	-.036	-.037	-.043	.403	.405	.404	.406					
.950	-.013	-.016	-.017	-.027	.400	.401	.401	.403					
.980	.010	.004	.003	-.005	.396	.397	.397	.399					

TABLE V. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.036	-.049	.405	.407
0.000	.956				.109				.05	-.021		.402	
.008	.477				.288				.10	-.023	-.042	.402	.406
.015	.350	-.016	-.332	-.400	.320	.401	.462	.475	.15	-.024		.403	
.021	.259				.342				.20	-.024	-.018	.402	.401
.028	.203				.354				.25	-.025	-.007	.402	.399
.034	.158	-.117	-.273	-.289	.364	.421	.451	.454	.30	-.027	.000	.403	.397
.042	.129				.370				.35	-.027	-.001	.403	.398
.051	.092				.379				.40	-.036	.001	.405	.397
.068	.066	-.124	-.198	-.198	.384	.423	.435	.436	.45	-.035	-.005	.405	.399
.085	.043				.389				.50	-.036	.001	.405	.398
.102	.024				.393				.55	I		I	
.136	-.033	-.132	-.141	-.134	.398	.424	.426	.425	.60	-.010	-.015	.400	.400
.169	-.021	-.161	-.122	-.089	.402	.429	.422	.416	.65	-.010		.399	
.258	-.040	-.128	-.092	-.061	.405	.423	.416	.410	.70	-.007	-.004	.399	.398
.300	-.024	-.104	-.058	-.036	.402	.419	.409	.404	.75	-.006		.399	
.400	-.024	-.098	-.049	-.028	.403	.417	.408	.403	.80	-.001	-.004	.398	.398
.500	-.039	-.098	-.049	-.036	.405	.417	.407	.405	.85	.000		.398	
.600	-.040	-.096	-.052	-.043	.406	.417	.408	.406	.90	.023		.397	
.700	-.045	-.095	-.055	-.048	.407	.416	.409	.407					
.800	-.043	-.086	-.051	-.052	.406	.415	.408	.408					
.900	-.020	-.065	-.035	-.034	.401	.411	.405	.404					
.950	-.008	-.046	-.016	-.021	.399	.407	.401	.401					
.980	.009	-.027	-.002	-.006	.395	.403	.398	.399					

(f) $M_\infty = 0.60$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.053	-.044	.618	.615
0.000	.405				.463				.05	-.027		.610	
.008	-.001				.602				.10	-.028	-.036	.611	.613
.015	-.030	-.030	-.025	-.030	.611	.611	.610	.610	.15	-.055		.619	
.021	-.057				.620				.20	-.050	-.035	.618	.612
.028	-.071				.624				.25	-.055	-.036	.619	.613
.034	-.101	-.099	-.098	-.093	.634	.633	.632	.630	.30	-.081	-.035	.626	.612
.042	-.096				.631				.35	-.093	-.048	.630	.615
.051	-.111				.635				.40	-.098	-.044	.632	.614
.068	-.098	-.096	-.082	-.093	.632	.632	.628	.630	.45	-.095	-.039	.630	.612
.085	-.103				.633				.50	-.093	-.036	.629	.612
.102	-.103				.633				.55	I		I	
.136	-.107	-.098	-.083	-.083	.634	.633	.628	.626	.60	-.036	-.038	.612	.612
.169	-.101	-.110	-.076	-.058	.632	.636	.626	.619	.65	-.009		.603	
.258	-.095	-.088	-.064	-.052	.630	.629	.622	.620	.70	-.012	-.015	.605	.595
.300	-.068	-.058	-.044	-.041	.623	.620	.614	.613	.75	-.004		.603	
.400	-.053	-.055	-.042	-.040	.618	.619	.614	.614	.80	-.002	-.010	.602	.603
.500	-.064	-.055	-.056	-.064	.622	.618	.619	.620	.85	.001		.601	
.600	-.056	-.061	-.053	-.074	.620	.620	.622	.624	.90	.001		.601	
.700	-.055	-.059	-.072	-.093	.619	.619	.623	.627					
.800	-.044	-.044	-.066	-.086	.615	.614	.621	.628					
.900	-.019	-.028	-.040	-.059	.607	.609	.615	.620					
.950	-.000	-.007	-.024	-.042	.601	.603	.608	.614					
.980	.022	.013	.001	-.013	.594	.596	.601	.604					

TABLE V. - Continued

(g) $M_\infty = 0.70$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.059	-.057	.723	.721
0.000	.445				.522				.05	-.029		.712	
.008	-.003				.702				.10	-.033	-.053	.713	.720
.015	-.019	-.025	-.032	-.030	.709	.709	.713	.712	.15	-.061		.724	
.021	-.051				.720				.20	-.066	-.053	.726	.719
.028	-.087				.734				.25	-.070	-.051	.728	.719
.034	-.111	-.099	-.105	-.098	.744	.737	.741	.738	.30	-.095	-.045	.735	.718
.042	-.105				.740				.35	-.111	-.048	.741	.719
.051	-.121				.745				.40	-.110	-.050	.741	.719
.068	-.105	-.100	-.089	-.093	.739	.737	.735	.735	.45	-.110	-.044	.741	.716
.085	-.105				.739				.50	-.095	-.039	.736	.712
.102	-.105				.739				.55	I		I	
.136	-.112	-.104	-.087	-.086	.742	.738	.734	.732	.60	-.039	-.044	.714	.715
.169	-.109	-.116	-.084	-.058	.741	.743	.733	.720	.65	-.014		.704	
.258	-.099	-.094	-.066	-.062	.737	.735	.727	.721	.70	-.021	-.001	.707	.698
.330	-.072	-.064	-.045	-.043	.726	.723	.716	.714	.75	-.009		.703	
.400	-.056	-.059	-.046	-.051	.721	.722	.717	.717	.80	-.010	-.022	.703	.706
.500	-.062	-.056	-.055	-.065	.723	.722	.720	.722	.85	-.008		.702	
.600	-.060	-.058	-.066	-.073	.722	.723	.724	.725	.90	-.008		.702	
.700	-.055	-.059	-.072	-.083	.720	.722	.727	.729					
.800	-.046	-.044	-.065	-.083	.717	.716	.725	.729					
.900	-.020	-.025	-.049	-.059	.707	.707	.718	.720					
.950	-.000	-.005	-.024	-.040	.699	.699	.708	.713					
.980	.024	.016	.002	-.012	.691	.692	.698	.702					

(h) $M_\infty = 0.80$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.030	-.025	.810	.807
0.000	.059				.770				.05	-.001		.797	
.008	-.188				.881				.10	-.021	-.025	.806	.808
.015	-.163	-.028	.061	.079	.872	.809	.769	.760	.15	-.050		.819	
.021	-.189				.881				.20	-.052	-.044	.819	.815
.028	-.199				.885				.25	-.052	-.037	.820	.812
.034	-.210	-.121	-.062	-.029	.891	.850	.824	.809	.30	-.084	-.034	.834	.811
.042	-.187				.880				.35	-.105	-.045	.844	.816
.051	-.192				.883				.40	-.105	-.046	.844	.816
.068	-.152	-.113	-.063	-.073	.865	.846	.827	.829	.45	-.095	-.039	.839	.814
.085	-.144				.861				.50	-.090	-.031	.835	.811
.102	-.145				.860				.55	I		I	
.136	-.143	-.115	-.087	-.083	.859	.847	.835	.834	.60	-.014	-.024	.801	.809
.169	-.128	-.126	-.085	-.061	.852	.853	.834	.825	.65	.011		.790	
.258	-.109	-.104	-.074	-.066	.844	.843	.830	.828	.70	-.001	.028	.795	.786
.300	-.078	-.072	-.045	-.043	.830	.828	.816	.818	.75	.009		.792	
.400	-.058	-.069	-.047	-.048	.822	.826	.818	.821	.80	.007	.008	.792	.795
.500	-.066	-.072	-.060	-.071	.825	.828	.823	.831	.85	.015		.789	
.600	-.057	-.071	-.073	-.080	.821	.828	.829	.835	.90	.013		.789	
.700	-.051	-.073	-.086	-.094	.818	.829	.833	.841					
.800	-.038	-.056	-.080	-.096	.813	.822	.831	.842					
.900	-.013	-.037	-.057	-.071	.802	.814	.820	.830					
.950	.009	-.008	-.029	-.043	.791	.802	.808	.820					
.980	.032	.019	-.001	-.015	.781	.790	.795	.805					

TABLE V. - Continued

(i) $M_\infty = 0.80$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.077	-.068	.834	.828
0.000	.483				.577				.05	-.045		.820	
.008	.022				.790				.10	-.063	-.063	.829	.827
.015	-.015	-.028	-.032	-.039	.807	.812	.814	.815	.15	-.074		.834	
.021	-.058				.827				.20	-.077	-.061	.836	.826
.028	-.090				.842				.25	-.081	-.051	.837	.821
.034	-.122	-.115	-.130	-.112	.856	.850	.858	.849	.30	-.104	-.049	.848	.820
.042	-.114				.852				.35	-.124	-.060	.856	.825
.051	-.134				.860				.40	-.126	-.061	.856	.825
.068	-.118	-.113	-.101	-.111	.853	.849	.946	.848	.45	-.123	-.057	.855	.824
.085	-.120				.853				.50	-.111	-.050	.849	.820
.102	-.119				.853				.55	I		I	
.136	-.124	-.114	-.093	-.132	.855	.849	.843	.844	.60	-.042	-.054	.818	.822
.169	-.115	-.122	-.090	-.068	.851	.852	.842	.829	.65	-.020		.808	
.258	-.107	-.098	-.072	-.065	.848	.843	.833	.827	.70	-.027	-.026	.811	.810
.300	-.073	-.063	-.040	-.041	.832	.827	.819	.817	.75	-.020		.809	
.400	-.057	-.058	-.042	-.047	.825	.824	.818	.820	.80	-.021	-.028	.807	.811
.500	-.068	-.060	-.058	-.063	.829	.825	.826	.827	.85	-.022		.807	
.600	-.066	-.064	-.071	-.076	.827	.827	.831	.832	.90	-.018		.806	
.700	-.059	-.065	-.077	-.085	.824	.827	.834	.836					
.800	-.044	-.050	-.068	-.090	.817	.820	.830	.839					
.900	-.020	-.028	-.043	-.063	.807	.811	.821	.827					
.950	.002	-.001	-.022	-.040	.797	.798	.809	.816					
.980	.030	.023	.007	-.039	.785	.788	.796	.802					

(j) $M_\infty = 0.80$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.073	-.070	.830	.828
0.000	.742				.442				.05	-.038		.814	
.008	.192				.711				.10	-.045	-.054	.818	.820
.015	.117	-.020	-.128	-.161	.744	.809	.856	.870	.15	-.067		.827	
.021	.052				.773				.20	-.062	-.046	.824	.817
.028	.006				.794				.25	-.066	-.034	.826	.812
.034	-.041	-.114	-.177	-.187	.815	.851	.877	.882	.30	-.088	-.029	.836	.810
.042	-.045				.816				.35	-.105	-.035	.843	.813
.051	-.076				.830				.40	-.104	-.035	.843	.813
.068	-.078	-.114	-.131	-.144	.831	.848	.856	.862	.45	-.096	-.033	.841	.812
.085	-.081				.834				.50	-.088	-.028	.839	.810
.102	-.090				.840				.55	I		I	
.136	-.101	-.116	-.112	-.116	.844	.849	.847	.850	.60	-.026	-.042	.811	.816
.169	-.100	-.130	-.100	-.074	.844	.855	.841	.831	.65	-.007		.802	
.258	-.100	-.102	-.073	-.066	.844	.842	.832	.827	.70	-.014	-.019	.806	.807
.300	-.066	-.067	-.045	-.043	.830	.826	.816	.817	.75	-.006		.802	
.400	-.052	-.060	-.044	-.042	.823	.823	.817	.816	.80	-.006	-.015	.803	.804
.500	-.054	-.061	-.054	-.054	.829	.825	.822	.822	.85	-.009		.801	
.600	-.064	-.053	-.044	-.065	.826	.826	.827	.826	.90	-.010		.801	
.700	-.061	-.065	-.044	-.077	.824	.826	.832	.832					
.800	-.053	-.051	-.044	-.083	.820	.820	.826	.834					
.900	-.028	-.027	-.044	-.053	.809	.810	.818	.820					
.950	-.004	-.004	-.011	-.029	.798	.799	.806	.809					
.980	.024	.020	.011	-.002	.785	.789	.795	.797					

TABLE V. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	-.074	-.067	.830	.828
0.000	.898				.345				.05	-.033		.811	
.008	.341				.642				.10	-.035	-.043	.812	.817
.015	.228	-.029	-.236	-.314	.694	.809	.903	.941	.15	-.060		.823	
.021	.152				.728				.20	-.055	-.029	.821	.811
.028	.092				.755				.25	-.054	-.019	.821	.806
.034	.046	-.124	-.240	-.272	.776	.852	.905	.923	.30	-.069	-.014	.827	.804
.042	.028				.784				.35	-.080	-.018	.832	.808
.051	-.039				.800				.40	-.079	-.018	.832	.807
.068	-.020	-.126	-.157	-.176	.805	.855	.872	.879	.45	-.073	-.020	.829	.809
.085	-.040				.814				.50	-.062	-.015	.825	.806
.102	-.052				.820				.55	I		I	
.136	-.079	-.127	-.134	-.133	.832	.855	.856	.860	.60	-.013	-.030	.802	.813
.169	-.081	-.147	-.117	-.086	.833	.864	.849	.839	.65	.001		.796	
.258	-.091	-.109	-.081	-.065	.837	.847	.833	.829	.70	-.013	-.007	.802	.803
.300	-.066	-.076	-.047	-.032	.826	.832	.818	.814	.75	-.005		.798	
.400	-.052	-.068	-.039	-.033	.819	.829	.814	.815	.80	-.005	-.004	.798	.802
.500	-.066	-.072	-.050	-.052	.826	.830	.819	.821	.85	-.002		.799	
.600	-.064	-.073	-.060	-.060	.827	.833	.823	.825	.90	-.001		.798	
.700	-.060	-.072	-.063	-.069	.825	.832	.825	.829					
.800	-.053	-.061	-.059	-.069	.822	.827	.823	.829					
.900	-.028	-.036	-.035	-.045	.811	.816	.812	.819					
.950	-.009	-.011	-.014	-.023	.802	.805	.802	.808					
.980	.020	.017	.009	.002	.789	.792	.792	.797					

(l) $M_\infty = 0.80$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	-.061	-.051	.825	.822
0.000	1.046				.230				.05	-.026		.810	
.008	.540				.548				.10	-.025	-.030	.809	.814
.015	.408	-.031	-.477	-.816	.611	.813	1.018	1.192	.15	-.042		.816	
.021	.320				.652				.20	-.035	-.009	.813	.804
.028	.248				.686				.25	-.033	.003	.813	.798
.034	.185	-.147	-.365	-.292	.714	.866	.965	.932	.30	-.038	.007	.817	.796
.042	.160				.727				.35	-.046	.003	.820	.798
.051	.116				.747				.40	-.045	.005	.820	.797
.068	.078	-.163	-.239	-.252	.765	.873	.906	.905	.45	-.039	.006	.817	.797
.085	.045				.779				.50	-.031	.004	.814	.796
.102	.020				.791				.55	I		I	
.136	-.017	-.168	-.170	-.149	.807	.875	.874	.867	.60	.007	-.018	.797	.806
.169	-.034	-.204	-.146	-.105	.815	.892	.864	.845	.65	.014		.793	
.258	-.051	-.155	-.104	-.065	.827	.870	.845	.827	.70	-.004	.001	.802	.798
.300	-.039	-.119	-.058	-.034	.817	.853	.825	.813	.75	.003		.798	
.400	-.031	-.109	-.048	-.027	.813	.849	.821	.810	.80	.004	.003	.798	.797
.500	-.046	-.110	-.055	-.041	.820	.849	.824	.817	.85	.004		.798	
.600	-.048	-.112	-.060	-.048	.821	.850	.827	.820	.90	.008		.796	
.700	-.048	-.108	-.063	-.059	.821	.848	.828	.824					
.800	-.046	-.092	-.054	-.060	.820	.841	.824	.825					
.900	-.027	-.074	-.033	-.036	.812	.832	.814	.814					
.950	-.012	-.048	-.015	-.019	.805	.820	.806	.806					
.980	.015	-.020	.004	.002	.792	.807	.798	.797					

TABLE V. - Continued

(m) $M_\infty = 0.85$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.061	-.056	.880	.878
0.000	.518				.595				.05	-.023		.861	
.008	.036				.833				.10	-.033	-.044	.866	.872
.015	-.005	-.020	-.025	-.031	.853	.860	.863	.866	.15	-.062		.881	
.021	-.054				.877				.20	-.063	-.043	.881	.871
.028	-.091				.895				.25	-.068	-.029	.883	.864
.034	-.126	-.117	-.132	-.123	.912	.908	.915	.911	.30	-.092	-.028	.895	.864
.042	-.120				.909				.35	-.110	-.041	.904	.870
.051	-.141				.919				.40	-.110	-.037	.904	.868
.068	-.123	-.121	-.108	-.120	.911	.909	.903	.908	.45	-.105	-.034	.902	.866
.085	-.124				.911				.50	-.092	-.031	.895	.865
.102	-.126				.912				.55	I		I	
.136	-.137	-.122	-.106	-.107	.917	.910	.902	.902	.60	-.017	-.035	.859	.867
.169	-.123	-.133	-.100	-.076	.911	.915	.899	.887	.65	.003		.849	
.258	-.112	-.103	-.079	-.069	.905	.901	.889	.884	.70	-.008	.002	.854	.849
.330	-.076	-.065	-.045	-.041	.887	.882	.873	.870	.75	-.001		.850	
.400	-.058	-.057	-.045	-.045	.878	.878	.872	.872	.80	.001	-.004	.850	.852
.500	-.070	-.063	-.053	-.065	.884	.881	.879	.881	.85	.000		.850	
.600	-.066	-.068	-.072	-.079	.882	.884	.886	.887	.90	.001		.850	
.700	-.060	-.067	-.079	-.095	.880	.882	.889	.894					
.800	-.047	-.051	-.073	-.092	.873	.874	.886	.893					
.900	-.020	-.031	-.049	-.064	.860	.865	.875	.879					
.950	.005	-.002	-.022	-.039	.848	.851	.861	.867					
.980	.035	.027	.009	-.004	.833	.837	.846	.851					

(n) $M_\infty = 0.90$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.067	-.060	.936	.934
0.000	.186				.804				.05	-.032		.918	
.008	-.184				.999				.10	-.057	-.058	.930	.930
.015	-.166	-.000	.067	.107	.989	.901	.855	.844	.15	-.082		.944	
.021	-.205				1.011				.20	-.082	-.066	.944	.934
.028	-.221				1.020				.25	-.106	-.051	.956	.926
.034	-.244	-.116	-.063	-.027	1.032	.962	.934	.914	.30	-.124	-.050	.967	.926
.042	-.219				1.019				.35	-.145	-.064	.978	.933
.051	-.256				1.038				.40	-.146	-.064	.978	.933
.068	-.182	-.140	-.086	-.093	.998	.973	.946	.948	.45	-.136	-.060	.973	.931
.085	-.169				.991				.50	-.123	-.052	.966	.927
.102	-.170				.992				.55	I		I	
.136	-.177	-.145	-.109	-.108	.995	.976	.958	.956	.60	-.013	-.049	.908	.925
.169	-.148	-.153	-.101	-.076	.980	.981	.955	.940	.65	-.005		.904	
.258	-.124	-.118	-.090	-.082	.967	.962	.948	.943	.70	-.018	-.001	.910	.900
.330	-.081	-.075	-.052	-.055	.944	.939	.929	.928	.75	-.012		.907	
.400	-.058	-.067	-.054	-.055	.932	.935	.929	.928	.80	-.012	-.014	.907	.907
.500	-.072	-.077	-.073	-.078	.939	.940	.939	.941	.85	-.016		.908	
.600	-.072	-.080	-.086	-.088	.937	.942	.946	.946	.90	-.010		.905	
.700	-.065	-.081	-.096	-.107	.933	.942	.952	.956					
.800	-.045	-.064	-.088	-.109	.923	.933	.948	.957					
.900	-.011	-.039	-.060	-.077	.905	.920	.933	.940					
.950	.015	-.007	-.030	-.048	.892	.903	.917	.924					
.980	.046	.025	.005	-.010	.875	.886	.898	.905					

TABLE V. - Continued

(o) $M_\infty = 0.90$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	-.069	-.068	.934	.933
0.000	.542				.617				.05	-.032		.915	
.008	.058				.868				.10	-.044	-.051	.922	.924
.015	.004	-.006	-.014	-.024	.896	.900	.905	.910	.15	-.072		.936	
.021	-.054				.927				.20	-.072	-.047	.936	.922
.028	-.094				.948				.25	-.092	-.031	.947	.913
.034	-.134	-.117	-.138	-.124	.969	.959	.971	.963	.30	-.103	-.027	.953	.912
.042	-.134				.969				.35	-.120	-.039	.961	.918
.051	-.166				.986				.40	-.120	-.040	.962	.918
.058	-.142	-.132	-.124	-.138	.974	.967	.964	.970	.45	-.107	-.038	.954	.917
.085	-.136				.970				.50	-.099	-.032	.950	.914
.102	-.142				.974				.55	I		I	
.136	-.156	-.137	-.121	-.127	.980	.969	.962	.965	.60	-.001	-.036	.898	.916
.169	-.139	-.149	-.110	-.085	.971	.976	.957	.942	.65	.006		.894	
.258	-.125	-.113	-.087	-.076	.964	.957	.944	.937	.70	-.010	-.011	.902	.904
.300	-.083	-.059	-.043	-.047	.941	.934	.924	.922	.75	.002		.897	
.400	-.057	-.060	-.047	-.052	.927	.928	.923	.925	.80	.000	-.008	.897	.902
.500	-.075	-.070	-.067	-.078	.937	.934	.934	.938	.85	-.000		.897	
.600	-.072	-.072	-.074	-.085	.935	.935	.937	.942	.90	-.001		.898	
.700	-.066	-.076	-.087	-.093	.932	.937	.944	.947					
.800	-.053	-.060	-.077	-.095	.925	.929	.938	.948					
.900	-.022	-.033	-.053	-.066	.909	.914	.925	.932					
.950	.005	-.001	-.024	-.040	.894	.898	.910	.918					
.980	.039	.031	.011	-.002	.877	.882	.891	.898					

(p) $M_\infty = 0.90$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	-.080	-.079	.940	.938
0.000	.791				.474				.05	-.041		.919	
.008	.234				.777				.10	-.057	-.055	.927	.925
.015	.153	-.009	-.114	-.161	.819	.901	.958	.982	.15	-.074		.936	
.021	.072				.860				.20	-.074	-.042	.937	.919
.028	.019				.888				.25	-.091	-.025	.945	.909
.034	-.034	-.122	-.201	-.227	.915	.960	1.005	1.018	.30	-.098	-.018	.949	.907
.042	-.047				.922				.35	-.109	-.023	.954	.913
.051	-.079				.939				.40	-.108	-.028	.954	.913
.058	-.083	-.138	-.157	-.170	.940	.969	.981	.988	.45	-.101	-.026	.950	.911
.085	-.098				.948				.50	-.089	-.026	.943	.911
.102	-.110				.955				.55	I		I	
.136	-.135	-.143	-.136	-.135	.968	.972	.969	.968	.60	.003	-.039	.895	.918
.169	-.123	-.156	-.123	-.095	.961	.979	.963	.947	.65	.004		.894	
.258	-.117	-.116	-.091	-.075	.958	.957	.945	.937	.70	-.013	-.013	.903	.907
.300	-.080	-.070	-.043	-.043	.938	.934	.923	.920	.75	-.006		.900	
.400	-.059	-.063	-.041	-.046	.927	.929	.919	.922	.80	-.005	-.011	.899	.903
.500	-.077	-.067	-.060	-.067	.936	.932	.928	.933	.85	-.005		.899	
.600	-.073	-.072	-.072	-.077	.935	.935	.935	.938	.90	-.008		.901	
.700	-.071	-.075	-.080	-.087	.934	.938	.939	.943					
.800	-.058	-.055	-.072	-.087	.927	.926	.934	.943					
.900	-.030	-.034	-.045	-.056	.912	.915	.920	.927					
.950	-.003	-.003	-.013	-.029	.898	.899	.903	.913					
.980	.032	.029	.016	.003	.880	.883	.888	.896					

TABLE V. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.069	-.063	.931	.929
0.000	.925				.385				.05	-.029		.911	
.009	.372				.705				.10	-.032	-.037	.913	.915
.015	.273	-.007	-.201	-.339	.756	.899	1.002	1.079	.15	-.054		.924	
.021	.182				.802				.20	-.050	-.017	.922	.905
.028	.117				.836				.25	-.055	.001	.925	.896
.034	.054	-.127	-.301	-.382	.868	.962	1.057	1.103	.30	-.070	.005	.932	.894
.042	.036				.877				.35	-.080	.001	.937	.895
.051	-.005				.898				.40	-.076	-.004	.936	.898
.068	-.027	-.157	-.177	-.180	.910	.979	.990	.991	.45	-.069	-.005	.932	.898
.085	-.050				.922				.50	-.057	-.005	.926	.899
.102	-.070				.933				.55	I		I	
.136	-.103	-.155	-.152	-.154	.950	.977	.976	.977	.60	.028	-.019	.881	.906
.169	-.100	-.170	-.133	-.104	.948	.985	.966	.950	.65	.021		.885	
.258	-.112	-.126	-.096	-.073	.955	.962	.946	.934	.70	.002	.002	.895	.894
.300	-.076	-.082	-.050	-.039	.936	.939	.922	.916	.75	.010		.891	
.400	-.054	-.073	-.044	-.041	.924	.934	.919	.917	.80	.015	.007	.888	.892
.500	-.069	-.080	-.053	-.058	.932	.938	.926	.927	.85	.011		.890	
.600	-.071	-.080	-.069	-.056	.933	.938	.932	.931	.90	.010		.891	
.700	-.058	-.084	-.076	-.079	.932	.940	.935	.938					
.800	-.059	-.057	-.063	-.074	.926	.931	.929	.936					
.900	-.035	-.043	-.035	-.045	.914	.918	.914	.920					
.950	-.010	-.010	-.010	-.018	.901	.901	.901	.906					
.980	.025	.022	.018	.011	.883	.884	.887	.891					

(r) $M_\infty = 0.90$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.073	-.067	.934	.933
0.000	1.081				.259				.05	-.035		.914	
.008	.584				.592				.10	-.037	-.039	.917	.918
.015	.451	.009	-.447	-.693	.665	.893	1.141	1.300	.15	-.054		.927	
.021	.352				.717				.20	-.047	-.013	.924	.904
.028	.277				.756				.25	-.050	.006	.925	.894
.034	.215	-.143	-.511	-.653	.788	.974	1.180	1.273	.30	-.055	.011	.927	.892
.042	.178				.806				.35	-.063	.001	.930	.898
.051	.128				.831				.40	-.059	.001	.928	.897
.068	.086	-.227	-.495	-.516	.853	1.019	1.172	1.186	.45	-.047	.002	.922	.897
.085	.046				.874				.50	-.039	-.003	.918	.899
.102	.014				.890				.55	I		I	
.136	-.040	-.215	-.151	-.123	.918	1.012	.979	.952	.60	.027	-.024	.883	.910
.159	-.059	-.229	-.142	-.096	.928	1.019	.974	.948	.65	.019		.888	
.258	-.090	-.172	-.103	-.063	.945	.989	.954	.931	.70	-.006	-.009	.901	.902
.300	-.054	-.126	-.057	-.029	.926	.964	.927	.913	.75	.001		.897	
.400	-.032	-.114	-.050	-.032	.914	.958	.924	.914	.80	-.001	-.002	.898	.899
.500	-.054	-.118	-.059	-.051	.926	.960	.928	.924	.85	-.002		.899	
.600	-.057	-.121	-.057	-.060	.928	.962	.933	.929	.90	-.003		.899	
.700	-.062	-.121	-.073	-.070	.930	.962	.936	.934					
.800	-.057	-.099	-.064	-.065	.927	.950	.931	.931					
.900	-.036	-.078	-.038	-.037	.917	.939	.917	.916					
.950	-.016	-.044	-.013	-.017	.906	.921	.904	.907					
.980	.019	-.009	.012	.006	.888	.902	.891	.894					

TABLE V. - Continued

(s) $M_\infty = 0.92$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I			0.00	-.066	-.069	.952	.955
0.000	.558					.621				.05	-.029		.932	
.008	.066					.881				.10	-.044	-.045	.941	.941
.015	.021	.001	.001	-.015		.935	.916	.916	.925	.15	-.072		.956	
.021	-.048					.943				.20	-.071	-.041	.955	.939
.028	-.088					.965				.25	-.087	-.023	.964	.929
.034	-.129	-.112	-.130	-.119		.987	.977	.987	.982	.30	-.104	-.019	.973	.927
.042	-.130					.987				.35	-.121	-.033	.983	.935
.051	-.178					1.015				.40	-.120	-.030	.982	.933
.068	-.141	-.135	-.125	-.141		.994	.990	.985	.994	.45	-.110	-.030	.977	.933
.085	-.143					.995				.50	-.096	-.027	.969	.932
.102	-.149					.999				.55	I		I	
.136	-.171	-.150	-.150	-.130		1.010	.999	.988	.988	.60	.005	-.034	.914	.933
.159	-.145	-.157	-.117	-.090		.996	1.003	.980	.966	.65	.012		.910	
.258	-.128	-.116	-.095	-.083		.986	.980	.968	.962	.70	-.005	-.004	.920	.919
.330	-.083	-.059	-.049	-.049		.962	.954	.943	.943	.75	.002		.916	
.400	-.059	-.060	-.048	-.052		.949	.950	.943	.945	.80	.003	-.003	.915	.918
.500	-.079	-.072	-.057	-.078		.959	.956	.953	.959	.85	.001		.916	
.600	-.077	-.075	-.080	-.088		.959	.958	.961	.964	.90	.000		.917	
.700	-.072	-.076	-.090	-.100		.956	.958	.966	.971					
.800	-.055	-.057	-.079	-.102		.947	.948	.959	.972					
.900	-.020	-.034	-.053	-.067		.928	.935	.945	.953					
.950	.008	-.002	-.019	-.037		.913	.918	.927	.937					
.980	.042	.032	.014	.000		.895	.900	.910	.917					

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I			0.00	-.062	-.073	.973	.979
0.000	.240					.808				.05	-.029		.955	
.008	-.142					1.018				.10	-.054	-.058	.969	.971
.015	-.137	.032	.111	.128		1.016	.921	.878	.868	.15	-.085		.986	
.021	-.188					1.045				.20	-.091	-.059	.989	.971
.028	-.216					1.061				.25	-.113	-.043	1.002	.961
.034	-.245	-.097	-.043	-.017		1.078	.993	.965	.948	.30	-.128	-.036	1.010	.958
.042	-.232					1.070				.35	-.152	-.051	1.024	.968
.051	-.228					1.068				.40	-.149	-.057	1.023	.969
.068	-.251	-.139	-.090	-.096		1.082	1.017	.989	.990	.45	-.138	-.051	1.016	.965
.085	-.260					1.087				.50	-.121	-.044	1.006	.962
.102	-.193					1.048				.55	I		I	
.136	-.185	-.170	-.130	-.127		1.043	1.035	1.012	1.008	.60	-.005	-.042	.942	.960
.159	-.172	-.168	-.120	-.089		1.036	1.033	1.006	.987	.65	.007		.935	
.258	-.155	-.135	-.111	-.093		1.026	1.014	1.001	.989	.70	-.010	-.012	.944	.943
.330	-.076	-.073	-.054	-.057		.981	.980	.968	.968	.75	-.003		.940	
.400	-.055	-.066	-.055	-.059		.969	.976	.968	.970	.80	-.008	-.010	.943	.943
.500	-.079	-.083	-.078	-.089		.983	.985	.982	.986	.85	-.006		.942	
.600	-.077	-.087	-.094	-.097		.982	.987	.991	.991	.90	-.001		.939	
.700	-.070	-.090	-.105	-.116		.977	.987	.997	1.001					
.800	-.049	-.069	-.097	-.115		.966	.975	.993	1.001					
.900	-.013	-.041	-.067	-.078		.946	.960	.976	.980					
.950	.020	-.004	-.030	-.047		.928	.939	.955	.963					
.980	.053	.032	.011	-.003		.910	.919	.933	.939					

TABLE V. - Continued

(u) $M_\infty = 0.94$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I	I	I	I	I	I	I	0.00	-.066	-.078	.975	.984
0.000	.573				.627				.05	-.027		.952	.984
.008	.076				.896				.10	-.049	-.348	.964	.967
.015	.032	.023	.015	.010	.919	.926	.929	.934	.15	-.075		.978	
.021	-.029				.952				.20	-.077	-.037	.979	.960
.028	-.075				.979				.25	-.096	-.018	.990	.950
.034	-.118	-.095	-.117	-.108	1.003	.992	1.003	1.000	.30	-.110	-.014	.998	.947
.042	-.116				1.002				.35	-.126	-.027	1.007	.954
.051	-.171				1.033				.40	-.124	-.029	1.006	.956
.068	-.172	-.144	-.140	-.174	1.034	1.021	1.015	1.039	.45	-.115	-.028	1.001	.956
.085	-.133				1.011				.50	-.097	-.026	.991	.954
.102	-.144				1.018				.55	I		I	
.136	-.202	-.173	-.158	-.169	1.051	1.039	1.026	1.036	.60	.010	-.032	.931	.958
.169	-.168	-.177	-.126	-.097	1.032	1.041	1.007	.994	.65	.018		.929	
.258	-.155	-.130	-.101	-.090	1.026	1.013	.993	.990	.70	.001	-.005	.938	.943
.300	-.079	-.066	-.049	-.048	.982	.976	.964	.967	.75	.006		.936	
.400	-.057	-.061	-.046	-.050	.971	.974	.962	.968	.80	.006	.003	.935	.938
.500	-.082	-.076	-.071	-.078	.984	.982	.976	.984	.85	.004		.938	
.600	-.081	-.080	-.088	-.092	.986	.984	.986	.991	.90	.003		.939	
.700	-.077	-.085	-.098	-.111	.983	.988	.991	1.003					
.800	-.061	-.066	-.087	-.107	.974	.977	.985	1.000					
.900	-.023	-.035	-.057	-.068	.953	.959	.969	.979					
.950	.011	.001	-.019	-.033	.934	.940	.949	.959					
.980	.047	.038	.018	.004	.915	.920	.929	.936					

(v) $M_\infty = 0.94$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I	I	I	I	I	I	I	0.00	-.072	-.081	.979	.982
0.000	.805				.491				.05	-.032		.956	.982
.008	.262				.797				.10	-.046	-.049	.964	.964
.015	.177	.024	-.057	-.137	.843	.923	.976	1.014	.15	-.071		.978	
.021	.097				.886				.20	-.068	-.025	.976	.951
.028	.038				.917				.25	-.086	-.005	.984	.940
.034	-.016	-.101	-.182	-.233	.946	.993	1.041	1.069	.30	-.095	-.002	.990	.938
.042	-.035				.957				.35	-.110	-.014	.998	.945
.051	-.081				.982				.40	-.105	-.012	.995	.944
.068	-.085	-.153	-.246	-.239	.984	1.023	1.079	1.073	.45	-.095	-.016	.989	.946
.085	-.102				.993				.50	-.083	-.016	.983	.946
.102	-.121				1.004				.55	I		I	
.136	-.171	-.177	-.167	-.159	1.033	1.037	1.033	1.026	.60	.019	-.029	.926	.953
.169	-.142	-.174	-.128	-.102	1.016	1.035	1.010	.994	.65	.021		.925	
.258	-.156	-.131	-.096	-.083	1.024	1.010	.990	.983	.70	.004	-.008	.935	.941
.300	-.079	-.068	-.045	-.046	.981	.974	.963	.962	.75	.009		.932	
.400	-.055	-.050	-.045	-.047	.968	.970	.962	.963	.80	.006	.004	.932	.935
.500	-.080	-.075	-.065	-.074	.981	.979	.973	.978	.85	.004		.935	
.600	-.083	-.080	-.079	-.086	.983	.982	.981	.985	.90	.002		.936	
.700	-.079	-.081	-.093	-.097	.981	.982	.989	.991					
.800	-.066	-.063	-.077	-.092	.974	.972	.979	.988					
.900	-.034	-.036	-.046	-.058	.956	.957	.962	.969					
.950	.001	-.001	-.012	-.025	.936	.937	.943	.951					
.980	.040	.035	.023	.010	.915	.918	.924	.931					

TABLE V. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I			0.00	-.073	-.082	.981	.986
0.000	.948					.396				.05	-.034		.959	
.008	.399					.724				.10	-.053	-.046	.970	.966
.015	.293	.031	-.137	-.289		.781	.923	1.017	1.107	.15	-.070		.979	
.021	.203					.830				.20	-.062	-.018	.975	.950
.028	.137					.865				.25	-.078	.002	.983	.939
.034	.075	-.103	-.305	-.349		.899	.998	1.116	1.143	.30	-.088	.009	.988	.936
.042	.048					.912				.35	-.097	-.003	.995	.942
.051	.005					.937				.40	-.092	-.006	.992	.944
.068	-.021	-.179	-.314	-.301		.952	1.041	1.122	1.115	.45	-.080	-.007	.985	.943
.085	-.050					.968				.50	-.066	-.010	.977	.945
.102	-.076					.983				.55	I		I	
.136	-.136	-.210	-.205	-.171		1.017	1.059	1.057	1.035	.60	.027	-.026	.925	.954
.169	-.125	-.215	-.122	-.090		1.010	1.063	1.009	.989	.65	.023		.928	
.258	-.149	-.142	-.096	-.075		1.025	1.020	.994	.982	.70	.001	-.005	.940	.943
.300	-.076	-.077	-.043	-.036		.983	.984	.965	.960	.75	.009		.935	
.400	-.049	-.071	-.046	-.039		.968	.980	.966	.962	.80	.010	.006	.935	.937
.500	-.076	-.083	-.067	-.064		.983	.987	.978	.976	.85	.004		.938	
.600	-.081	-.089	-.079	-.074		.985	.990	.985	.981	.90	-.000		.940	
.700	-.083	-.092	-.088	-.090		.987	.992	.989	.991					
.800	-.069	-.073	-.070	-.083		.979	.980	.980	.986					
.900	-.039	-.045	-.037	-.045		.962	.964	.961	.965					
.950	-.007	-.008	-.004	-.013		.945	.944	.943	.947					
.980	.034	.029	.026	.020		.922	.926	.927	.929					

(x) $M_\infty = 0.94$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I			0.00	-.048	-.063	.964	.972
0.000	1.098					.270				.05	-.015		.945	
.008	.602					.610				.10	-.018	-.029	.947	.952
.015	.471	.042	-.371	-.585		.683	.914	1.153	1.294	.15	-.047		.963	
.021	.373					.735				.20	-.034	.006	.956	.933
.028	.302					.774				.25	-.048	.027	.963	.922
.034	.233	-.108	-.458	-.586		.810	.997	1.209	1.295	.30	-.049	.029	.964	.921
.042	.196					.830				.35	-.057	.020	.968	.925
.051	.147					.857				.40	-.052	.016	.965	.929
.068	.096	-.195	-.454	-.490		.884	1.047	1.206	1.231	.45	-.036	.014	.957	.930
.085	.055					.907				.50	-.023	.012	.950	.932
.102	.019					.926				.55	I		I	
.136	-.052	-.290	-.408	-.370		.966	1.103	1.176	1.154	.60	.048	-.010	.910	.944
.169	-.075	-.376	-.194	-.141		.978	1.156	1.046	1.017	.65	.038		.916	
.258	-.151	-.160	-.075	-.030		1.021	1.026	.979	.955	.70	.010	.011	.931	.933
.300	-.069	-.098	-.038	-.007		.975	.991	.958	.942	.75	.015		.929	
.400	-.029	-.108	-.046	-.025		.953	.997	.963	.952	.80	.015	.016	.928	.930
.500	-.057	-.123	-.065	-.034		.968	1.006	.973	.970	.85	.013		.930	
.600	-.064	-.130	-.074	-.066		.972	1.009	.978	.977	.90	.011		.931	
.700	-.069	-.131	-.080	-.077		.975	1.011	.981	.983					
.800	-.066	-.111	-.069	-.073		.973	1.000	.975	.981					
.900	-.044	-.079	-.033	-.036		.961	.982	.956	.960					
.950	-.016	-.040	-.006	-.015		.945	.960	.940	.949					
.980	.025	-.000	.018	.012		.923	.939	.927	.934					

TABLE V. - Continued

(y) $M_\infty = 0.96$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.50	-.060	-.083	.991	1.007
0.000	.595				.628				.05	-.025		.971	
.008	.105				.898				.10	-.040	-.049	.979	.985
.015	.055	.041	.037	.020	.926	.933	.936	.945	.15	-.077		1.000	
.021	-.010				.961				.20	-.079	-.034	1.001	.976
.028	-.058				.989				.25	-.102	-.011	1.015	.963
.034	-.103	-.078	-.103	-.091	1.015	1.001	1.015	1.008	.30	-.119	-.006	1.025	.960
.042	-.097				1.012				.35	-.137	-.023	1.035	.970
.051	-.149				1.043				.40	-.134	-.023	1.033	.972
.068	-.187	-.192	-.187	-.183	1.064	1.068	1.065	1.065	.45	-.115	-.025	1.022	.973
.085	-.182				1.062				.50	-.097	-.021	1.012	.971
.102	-.142				1.038				.55				
.136	-.184	-.176	-.176	-.178	1.064	1.059	1.058	1.062	.60	.022	-.026	.945	.972
.169	-.171	-.205	-.150	-.114	1.056	1.077	1.048	1.025	.65	.025		.943	
.258	-.220	-.185	-.152	-.123	1.085	1.065	1.044	1.028	.70	.007	-.003	.953	.957
.300	-.129	-.090	-.064	-.059	1.031	1.008	.993	.989	.75	.012		.950	
.400	-.044	-.051	-.044	-.046	.982	.985	.981	.981	.80	.011	.007	.950	.951
.500	-.084	-.079	-.077	-.084	1.004	1.002	1.000	1.003	.85	.004		.954	
.600	-.091	-.091	-.093	-.099	1.008	1.008	1.009	1.012	.90	.007		.953	
.700	-.088	-.094	-.111	-.116	1.008	1.013	1.020	1.022					
.800	-.065	-.070	-.093	-.112	.994	.999	1.010	1.019					
.900	-.022	-.035	-.053	-.069	.970	.979	.987	.994					
.950	.013	.006	-.016	-.034	.949	.954	.966	.975					
.980	.052	.042	.023	.008	.927	.931	.944	.951					

(z) $M_\infty = 0.98$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.145	-.102	1.062	1.038
0.000	.315				.798				.05	-.092		1.029	
.008	-.072				1.017				.10	-.104	-.079	1.038	1.024
.015	-.083	.074	.150	.168	1.026	.935	.890	.881	.15	-.123		1.051	
.021	-.137				1.060				.20	-.127	-.052	1.054	1.008
.028	-.165				1.078				.25	-.126	-.024	1.054	.991
.034	-.184	-.051	-.009	.030	1.090	1.007	.980	.950	.30	-.140	-.021	1.059	.990
.042	-.190				1.090				.35	-.170	-.043	1.077	1.002
.051	-.199				1.095				.40	-.178	-.052	1.082	1.008
.068	-.196	-.147	-.055	-.057	1.093	1.065	1.009	1.017	.45	-.143	-.046	1.060	1.004
.085	-.209				1.101				.50	-.120	-.042	1.046	1.001
.102	-.207				1.099				.55				
.136	-.229	-.174	-.150	-.155	1.113	1.081	1.068	1.069	.60	.018	-.041	.967	1.001
.169	-.183	-.200	-.151	-.114	1.087	1.097	1.069	1.044	.65	.026		.962	
.258	-.231	-.213	-.170	-.153	1.117	1.105	1.081	1.068	.70	.002	-.007	.976	.981
.300	-.200	-.179	-.134	-.135	1.097	1.084	1.056	1.057	.75	.001		.977	
.400	-.089	-.115	-.106	-.105	1.030	1.045	1.038	1.039	.80	-.005	-.001	.980	.978
.500	-.090	-.111	-.110	-.121	1.030	1.043	1.040	1.049	.85	-.008		.982	
.600	-.089	-.115	-.123	-.130	1.030	1.045	1.048	1.055	.90	-.002		.978	
.700	-.081	-.124	-.142	-.120	1.025	1.051	1.059	1.048					
.800	-.064	-.075	-.125	-.142	1.015	1.021	1.050	1.062					
.900	-.001	-.026	-.062	-.070	.977	.992	1.014	1.019					
.950	.037	.015	.001	-.031	.956	.969	.976	.995					
.980	.073	.054	.038	.013	.935	.946	.955	.970					

TABLE V. - Continued

(aa) $M_\infty = 0.98$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.138	-.123	1.060	1.052
0.000	.625				.625				.05	-.079		1.023	
.008	.135				.899				.10	-.078	-.087	1.023	1.031
.015	.086	.074	.065	.056	.928	.936	.940	.946	.15	-.106		1.041	
.021	.025				.964				.20	-.109	-.008	1.043	.984
.028	-.021				.991				.25	-.127	.015	1.055	.971
.034	-.066	-.043	-.073	-.053	1.018	1.004	1.020	1.011	.30	-.147	.012	1.066	.972
.042	-.064				1.016				.35	-.170	-.004	1.081	.981
.051	-.107				1.043				.40	-.158	-.014	1.073	.987
.068	-.155	-.159	-.158	-.152	1.072	1.074	1.071	1.070	.45	-.128	-.015	1.055	.988
.085	-.168				1.080				.50	-.074	-.017	1.022	.989
.102	-.151				1.069				.55	I		I	
.136	-.176	-.151	-.160	-.175	1.084	1.069	1.075	1.084	.60	.033	-.026	.960	.995
.169	-.158	-.184	-.158	-.129	1.073	1.089	1.073	1.055	.65	.037		.957	
.258	-.226	-.202	-.169	-.151	1.116	1.101	1.080	1.070	.70	.021	.001	.967	.979
.300	-.201	-.168	-.127	-.125	1.100	1.080	1.054	1.054	.75	.023		.966	
.400	-.106	-.103	-.093	-.094	1.042	1.041	1.034	1.035	.80	.018	.014	.968	.971
.500	-.106	-.105	-.103	-.113	1.041	1.041	1.040	1.046	.85	.013		.972	
.600	-.113	-.112	-.118	-.126	1.046	1.046	1.049	1.054	.90	.012		.972	
.700	-.124	-.128	-.140	-.149	1.053	1.055	1.062	1.067					
.800	-.127	-.076	-.105	-.125	1.054	1.024	1.041	1.053					
.900	-.000	-.016	-.049	-.049	.979	.988	1.008	1.008					
.950	.039	.026	.002	-.011	.957	.964	.978	.986					
.980	.078	.063	.044	.030	.934	.942	.953	.961					

(bb) $M_\infty = 0.98$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	-.147	-.130	1.067	1.054
0.000	.842				.493				.05	-.072		1.021	
.008	.306				.805				.10	-.073	-.053	1.022	1.008
.015	.219	.072	-.006	-.074	.854	.935	.983	1.020	.15	-.087		1.028	
.021	.137				.898				.20	-.082	-.019	1.024	.989
.028	.079				.930				.25	-.090	.007	1.028	.973
.034	.023	-.046	-.153	-.185	.962	1.004	1.061	1.088	.30	-.125	.010	1.049	.971
.042	.002				.974				.35	-.145	-.005	1.061	.980
.051	-.059				1.010				.40	-.133	-.011	1.056	.984
.068	-.055	-.148	-.204	-.188	1.009	1.065	1.102	1.090	.45	-.110	-.012	1.044	.986
.085	-.073				1.021				.50	-.077	-.014	1.024	.987
.102	-.085				1.029				.55	I		I	
.136	-.152	-.168	-.200	-.214	1.069	1.077	1.096	1.108	.60	.034	-.028	.958	.996
.169	-.145	-.210	-.201	-.169	1.063	1.103	1.096	1.080	.65	.037		.956	
.258	-.221	-.222	-.183	-.155	1.111	1.112	1.084	1.072	.70	.012	-.009	.970	.983
.300	-.200	-.175	-.132	-.121	1.097	1.082	1.053	1.049	.75	.014		.969	
.400	-.117	-.103	-.092	-.082	1.046	1.038	1.029	1.025	.80	.011	.009	.971	.972
.500	-.105	-.106	-.099	-.085	1.039	1.040	1.035	1.028	.85	.004		.974	
.600	-.109	-.110	-.110	-.086	1.041	1.042	1.044	1.027	.90	.001		.976	
.700	-.123	-.131	-.107	-.104	1.050	1.055	1.042	1.037					
.800	-.084	-.096	-.091	-.115	1.026	1.036	1.032	1.043					
.900	-.019	-.020	-.033	-.051	.988	.990	.996	1.005					
.950	.018	.019	.011	-.007	.967	.968	.971	.979					
.980	.061	.056	.046	.035	.942	.945	.951	.957					

TABLE V. - Concluded

(cc) $M_\infty = 0.98$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I							0.00	-.140	-.095	1.062	1.033
0.000	.969				.405				.05	-.075		1.022	
.008	.430				.735				.10	-.077	-.043	1.024	1.002
.015	.353	.080	-.075	-.222	.791	.931	1.022	1.111	.15	-.097		1.038	
.021	.244				.841				.20	-.095	-.000	1.037	.977
.028	.179				.878				.25	-.111	.023	1.047	.964
.034	.117	-.053	-.255	-.290	.913	1.009	1.132	1.155	.30	-.103	.024	1.039	.963
.042	.092				.926				.35	-.125	.011	1.052	.971
.051	.039				.956				.40	-.115	.003	1.047	.976
.068	.013	-.127	-.253	-.272	.971	1.053	1.133	1.143	.45	-.067	.003	1.018	.976
.085	-.012				.986				.50	-.044	-.002	1.005	.977
.102	-.040				1.002				.55	I		I	
.136	-.113	-.192	-.237	-.240	1.046	1.093	1.125	1.123	.60	.047	-.021	.950	.988
.169	-.116	-.242	-.225	-.206	1.046	1.123	1.117	1.099	.65	.044		.952	
.258	-.208	-.252	-.191	-.161	1.102	1.130	1.096	1.071	.70	.020	-.003	.966	.977
.300	-.190	-.198	-.131	-.120	1.091	1.096	1.057	1.046	.75	.022		.964	
.400	-.133	-.109	-.084	-.075	1.056	1.042	1.028	1.020	.80	.017	.017	.968	.966
.500	-.104	-.116	-.099	-.088	1.039	1.045	1.037	1.028	.85	.012		.971	
.600	-.101	-.100	-.108	-.106	1.037	1.036	1.042	1.039	.90	.007		.973	
.700	-.091	-.117	-.116	-.131	1.032	1.047	1.048	1.054					
.800	-.083	-.083	-.077	-.102	1.025	1.027	1.024	1.037					
.900	-.035	-.034	-.023	-.021	.998	.995	.991	.989					
.950	.009	.008	.017	.010	.972	.971	.967	.972					
.980	.055	.048	.049	.041	.945	.948	.949	.953					

(dd) $M_\infty = 0.98$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.125	-.087	1.050	1.026
0.000	1.123				.273				.05	-.055		1.008	
.008	.640				.615				.10	-.056	-.003	1.011	.979
.015	.513	.094	-.296	-.495	.688	.921	1.158	1.296	.15	-.083		1.026	
.021	.416				.742				.20	-.079	.030	1.024	.960
.028	.342				.784				.25	-.091	.045	1.031	.951
.034	.282	-.058	-.386	-.509	.818	1.010	1.217	1.306	.30	-.072	.047	1.021	.950
.042	.243				.841				.35	-.066	.035	1.017	.957
.051	.187				.871				.40	-.046	.031	1.005	.959
.068	.137	-.143	-.382	-.432	.899	1.060	1.216	1.251	.45	-.029	.027	.994	.962
.085	.095				.922				.50	-.006	.022	.980	.964
.102	.058				.943				.55	I		I	
.136	-.017	-.243	-.369	-.354	.987	1.121	1.207	1.197	.60	.066	-.004	.938	.980
.169	-.051	-.323	-.334	-.273	1.006	1.173	1.184	1.144	.65	.056		.943	
.258	-.163	-.357	-.235	-.168	1.073	1.198	1.120	1.078	.70	.023	.011	.962	.971
.300	-.154	-.325	-.149	-.114	1.067	1.176	1.068	1.045	.75	.026		.960	
.400	-.149	-.166	-.085	-.064	1.064	1.076	1.029	1.015	.80	.027	.027	.960	.962
.500	-.132	-.170	-.105	-.093	1.054	1.079	1.040	1.032	.85	.019		.964	
.600	-.102	-.168	-.120	-.113	1.035	1.078	1.048	1.044	.90	.017		.965	
.700	-.116	-.180	-.106	-.118	1.043	1.085	1.039	1.047					
.800	-.119	-.104	-.060	-.086	1.045	1.039	1.012	1.028					
.900	-.013	-.045	-.022	-.014	.984	1.004	.989	.985					
.950	.012	-.010	.012	.007	.970	.983	.968	.974					
.980	.048	.025	.035	.029	.950	.963	.955	.962					

TABLE VI. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 2

(a) $M_\infty = 0.40$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.83$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.033	.004	.406	.398
0.000	-1.245				.620				.05	-.001		.400	
.008	-.330				.473				.10	-.001	-.024	.399	.404
.015	-.267	-.192	-.090	-.091	.451	.438	.418	.417	.15	-.059		.411	
.021	-.255				.449				.20	-.046	-.041	.409	.407
.028	-.249				.448				.25	-.049	-.043	.409	.408
.034	-.238	-.170	-.122	-.091	.446	.433	.424	.417	.30	-.074	-.023	.414	.404
.042	-.218				.442				.35	-.095	-.053	.418	.410
.051	-.202				.439				.40	-.095	-.052	.419	.410
.068	-.172	-.132	-.089	-.087	.434	.426	.417	.417	.45	-.098	-.038	.419	.407
.085	-.159				.431				.50	-.095	-.027	.418	.405
.102	-.147				.428				.55	I		I	
.136	-.137	-.118	-.088	-.085	.427	.423	.417	.417	.60	-.054	-.022	.410	.404
.169	-.124	-.123	-.085	-.065	.424	.424	.417	.412	.65	-.018		.402	
.258	-.103	-.098	-.072	-.065	.419	.419	.414	.412	.70	-.002	-.064	.399	.413
.300	-.080	-.072	-.054	-.047	.415	.413	.410	.409	.75	.019		.395	
.400	-.061	-.069	-.055	-.055	.412	.413	.410	.411	.80	.027	.002	.394	.399
.500	-.064	-.069	-.065	-.075	.412	.413	.413	.414	.85	.021		.395	
.600	-.063	-.069	-.076	-.080	.412	.413	.414	.415	.90	.025		.394	
.700	-.054	-.074	-.084	-.093	.410	.414	.416	.418					
.800	-.046	-.061	-.077	-.095	.408	.412	.415	.418					
.900	-.028	-.052	-.057	-.081	.405	.410	.412	.415					
.950	-.015	-.038	-.053	-.070	.402	.407	.409	.413					
.980	-.008	-.026	-.041	-.056	.401	.405	.407	.411					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.83$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.058	-.019	.411	.403
0.000	-.486				.492				.05	-.029		.405	
.008	-.229				.444				.10	-.027	-.033	.405	.407
.015	-.178	-.171	-.170	-.191	.435	.433	.433	.437	.15	-.071		.413	
.021	-.172				.433				.20	-.053	-.050	.410	.409
.028	-.167				.433				.25	-.057	-.044	.410	.408
.034	-.176	-.173	-.163	-.166	.434	.434	.432	.432	.30	-.075	-.020	.414	.403
.042	-.166				.432				.35	-.086	-.047	.417	.409
.051	-.152				.430				.40	-.097	-.041	.419	.407
.068	-.139	-.123	-.118	-.118	.427	.424	.423	.423	.45	-.091	-.034	.418	.406
.085	-.125				.425				.50	-.094	-.026	.418	.405
.102	-.123				.424				.55	I		I	
.136	-.122	-.114	-.099	-.102	.423	.422	.419	.420	.60	-.056	-.029	.410	.405
.169	-.115	-.122	-.093	-.073	.422	.424	.418	.414	.65	-.023		.404	
.258	-.099	-.093	-.075	-.072	.419	.418	.414	.414	.70	-.011	-.025	.401	.404
.300	-.078	-.069	-.052	-.046	.415	.413	.409	.408	.75	.015		.396	
.400	-.061	-.062	-.050	-.057	.411	.412	.409	.410	.80	.017	-.005	.396	.399
.500	-.069	-.063	-.063	-.068	.413	.412	.412	.413	.85	.018		.395	
.600	-.064	-.064	-.068	-.078	.412	.412	.413	.415	.90	.013		.397	
.700	-.064	-.064	-.077	-.089	.413	.412	.415	.417					
.800	-.055	-.053	-.071	-.092	.410	.410	.413	.418					
.900	-.036	-.043	-.059	-.078	.406	.408	.410	.414					
.950	-.028	-.031	-.044	-.069	.405	.406	.408	.413					
.980	-.015	-.018	-.037	-.054	.402	.402	.407	.410					

TABLE VI. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.83$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.076	-.339	.414	.407
0.000	.120				.374				.05	-.049		.409	
.008	-.061				.411				.10	-.043	-.053	.408	.410
.015	-.057	-.182	-.249	-.278	.410	.435	.448	.454	.15	-.079		.415	
.021	-.085				.416				.20	-.059	-.053	.411	.410
.028	-.096				.419				.25	-.059	-.045	.411	.408
.034	-.103	-.173	-.216	-.212	.420	.434	.442	.441	.30	-.076	-.027	.415	.405
.042	-.105				.420				.35	-.090	-.043	.417	.408
.051	-.103				.420				.40	-.090	-.033	.417	.406
.068	-.099	-.128	-.147	-.163	.419	.425	.428	.431	.45	-.099	-.032	.419	.405
.085	-.101				.419				.50	-.090	-.026	.417	.404
.102	-.097				.419				.55	I		I	
.136	-.099	-.119	-.113	-.116	.419	.423	.422	.422	.60	-.064	-.039	.412	.407
.169	-.096	-.126	-.103	-.084	.418	.425	.420	.416	.65	-.035		.407	
.258	-.095	-.097	-.081	-.072	.419	.419	.415	.414	.70	-.016	-.029	.402	.405
.300	-.068	-.071	-.054	-.047	.413	.414	.410	.409	.75	.004		.398	
.400	-.057	-.064	-.050	-.051	.410	.412	.409	.410	.80	.012	-.014	.397	.402
.500	-.065	-.064	-.055	-.061	.412	.412	.410	.412	.85	.005		.398	
.600	-.065	-.065	-.069	-.073	.412	.412	.413	.413	.90	.001		.399	
.700	-.065	-.067	-.073	-.080	.412	.413	.414	.415					
.800	-.056	-.057	-.066	-.084	.411	.410	.412	.416					
.900	-.040	-.046	-.055	-.070	.407	.408	.410	.413					
.950	-.031	-.034	-.046	-.060	.406	.406	.409	.411					
.980	-.019	-.022	-.031	-.048	.403	.404	.405	.409					

(d) $M_\infty = 0.40$, $\alpha = 4.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.83$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.079	-.041	.416	.407
0.000	.508				.281				.05	-.040		.407	
.008	.104				.377				.10	-.037	-.048	.407	.409
.015	.069	-.183	-.334	-.378	.385	.436	.465	.472	.15	-.061		.412	
.021	.021				.395				.20	-.051	-.038	.410	.407
.028	-.010				.401				.25	-.050	-.036	.409	.406
.034	-.027	-.179	-.269	-.273	.404	.435	.452	.453	.30	-.063	-.010	.412	.401
.042	-.041				.407				.35	-.064	-.022	.412	.404
.051	-.045				.408				.40	-.073	-.022	.414	.404
.068	-.055	-.135	-.184	-.186	.410	.427	.436	.436	.45	-.074	-.012	.414	.402
.085	-.053				.412				.50	-.071	-.013	.414	.402
.102	-.064				.413				.55	I		I	
.136	-.077	-.122	-.128	-.130	.415	.423	.425	.425	.60	-.051	-.027	.409	.405
.169	-.077	-.140	-.114	-.095	.414	.427	.422	.419	.65	-.023		.404	
.258	-.081	-.103	-.084	-.073	.415	.420	.416	.414	.70	-.011	-.024	.402	.404
.300	-.064	-.077	-.053	-.047	.413	.415	.411	.409	.75	.011		.397	
.400	-.050	-.073	-.050	-.048	.410	.414	.409	.409	.80	.015	-.008	.396	.401
.500	-.054	-.069	-.056	-.058	.412	.413	.410	.411	.85	.013		.397	
.600	-.063	-.070	-.061	-.065	.412	.414	.412	.412	.90	.006		.398	
.700	-.064	-.072	-.065	-.073	.412	.414	.413	.414					
.800	-.059	-.061	-.051	-.074	.411	.412	.412	.414					
.900	-.043	-.051	-.053	-.062	.408	.410	.409	.412					
.950	-.032	-.038	-.039	-.052	.406	.407	.407	.410					
.980	-.022	-.027	-.034	-.042	.403	.405	.406	.408					

TABLE VI. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.051	-.032	.414	.408
0.000	.859				.163				.05	-.040		.410	
.008	.378				.316				.10	-.036	-.036	.409	.408
.015	.264	-.188	-.501	-1.038	.343	.439	.498	.590	.15	-.036		.409	
.021	.195				.359				.20	-.030	-.020	.407	.405
.028	.148				.370				.25	-.025	-.008	.406	.403
.034	.106	-.193	-.361	-.445	.379	.440	.472	.488	.30	-.027	.007	.406	.400
.042	.085				.383				.35	-.031	.002	.407	.402
.051	.059				.389				.40	-.043	.005	.410	.400
.068	.037	-.158	-.240	-.213	.394	.433	.449	.444	.45	-.044	.011	.410	.399
.085	.016				.398				.50	-.041	.013	.410	.399
.102	-.000				.402				.55	I		I	
.136	-.024	-.153	-.161	-.144	.406	.432	.434	.430	.60	-.031	-.007	.408	.403
.159	-.034	-.183	-.137	-.104	.408	.438	.429	.423	.65	-.008		.403	
.258	-.054	-.139	-.102	-.069	.413	.429	.422	.416	.70	.005	-.006	.400	.402
.300	-.034	-.118	-.068	-.044	.408	.425	.415	.410	.75	.018		.398	
.400	-.031	-.106	-.057	-.038	.408	.423	.413	.409	.80	.020	.006	.397	.400
.500	-.048	-.108	-.058	-.044	.411	.423	.413	.410	.85	.023		.396	
.600	-.046	-.105	-.062	-.051	.411	.423	.414	.411	.90	.022		.397	
.700	-.050	-.108	-.065	-.058	.412	.423	.415	.413					
.800	-.050	-.094	-.059	-.063	.412	.421	.414	.414					
.900	-.039	-.084	-.051	-.051	.409	.419	.412	.411					
.950	-.033	-.068	-.045	-.050	.408	.416	.411	.411					
.980	-.021	-.059	-.035	-.043	.406	.413	.408	.410					

(f) $M_\infty = 0.60$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.83$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.075	-.036	.628	.615
0.000	-.652				.807				.05	-.036		.616	
.008	-.276				.692				.10	-.038	-.057	.617	.623
.015	-.200	-.212	-.214	-.227	.668	.672	.672	.677	.15	-.087		.632	
.021	-.191				.655				.20	-.072	-.067	.627	.626
.028	-.195				.655				.25	-.069	-.058	.626	.623
.034	-.196	-.194	-.193	-.187	.666	.666	.666	.664	.30	-.091	-.028	.633	.614
.042	-.176				.660				.35	-.109	-.055	.639	.622
.051	-.173				.659				.40	-.115	-.049	.641	.620
.068	-.149	-.145	-.135	-.137	.652	.651	.648	.648	.45	-.112	-.041	.640	.617
.085	-.140				.649				.50	-.110	-.035	.639	.616
.102	-.134				.647				.55	I		I	
.136	-.130	-.126	-.109	-.112	.646	.644	.639	.640	.60	-.073	-.043	.628	.618
.169	-.121	-.133	-.104	-.080	.643	.646	.637	.630	.65	-.038		.617	
.258	-.107	-.104	-.081	-.075	.639	.638	.630	.629	.70	-.022	-.037	.611	.616
.300	-.081	-.076	-.058	-.050	.630	.629	.623	.620	.75	.005		.602	
.400	-.064	-.066	-.056	-.055	.625	.626	.622	.622	.80	.010	-.015	.601	.609
.500	-.072	-.067	-.056	-.071	.628	.626	.625	.627	.85	.008		.602	
.600	-.066	-.068	-.077	-.082	.625	.626	.629	.631	.90	.003		.603	
.700	-.065	-.071	-.083	-.094	.625	.627	.631	.635					
.800	-.057	-.059	-.078	-.095	.622	.623	.629	.635					
.900	-.041	-.049	-.058	-.082	.617	.620	.626	.631					
.950	-.030	-.037	-.054	-.058	.614	.616	.622	.626					
.980	-.014	-.025	-.042	-.056	.609	.612	.618	.622					

TABLE VI. - Continued

(g) $M_\infty = 0.70$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.075	-.036	.730	.716
0.000	-.684				.964				.05	-.037		.716	
.008	-.315				.822				.10	-.051	-.058	.721	.724
.015	-.232	-.235	-.233	-.251	.790	.790	.791	.798	.15	-.087		.736	
.021	-.212				.783				.20	-.069	-.062	.728	.726
.023	-.209				.782				.25	-.065	-.059	.727	.724
.034	-.211	-.221	-.213	-.203	.782	.784	.783	.779	.30	-.091	-.023	.737	.711
.042	-.189				.774				.35	-.105	-.052	.742	.721
.051	-.185				.772				.40	-.116	-.046	.746	.719
.068	-.160	-.152	-.149	-.154	.763	.758	.759	.761	.45	-.115	-.035	.746	.715
.085	-.153				.760				.50	-.113	-.026	.745	.712
.102	-.148				.758				.55	I		I	
.136	-.141	-.133	-.115	-.118	.756	.753	.747	.747	.60	-.071	-.033	.729	.715
.169	-.127	-.139	-.109	-.083	.751	.755	.744	.734	.65	-.035		.713	
.258	-.111	-.108	-.082	-.077	.743	.743	.733	.732	.70	-.015	-.026	.706	.711
.300	-.081	-.074	-.055	-.052	.731	.730	.723	.721	.75	.015		.694	
.400	-.063	-.068	-.054	-.057	.724	.728	.722	.724	.80	.018	-.016	.693	.708
.500	-.077	-.068	-.065	-.073	.729	.728	.726	.730	.85	.015		.694	
.600	-.069	-.057	-.078	-.083	.727	.728	.731	.734	.90	.007		.699	
.700	-.069	-.074	-.086	-.096	.728	.730	.735	.738					
.800	-.058	-.060	-.079	-.098	.724	.724	.732	.739					
.900	-.043	-.047	-.067	-.084	.718	.720	.728	.734					
.950	-.030	-.034	-.053	-.072	.713	.715	.721	.730					
.980	-.017	-.024	-.038	-.060	.708	.711	.715	.725					

(h) $M_\infty = 0.80$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.073	-.035	.832	.813
0.000	-1.279				1.478				.05	-.036		.815	
.008	-.931				1.255				.10	-.042	-.065	.818	.827
.015	-.535	-.275	-.157	-.149	1.047	.922	.870	.864	.15	-.099		.843	
.021	-.291				.931				.20	-.081	-.080	.836	.834
.028	-.291				.931				.25	-.080	-.078	.833	.832
.034	-.297	-.247	-.180	-.157	.932	.909	.880	.868	.30	-.113	-.041	.848	.816
.042	-.272				.920				.35	-.134	-.080	.857	.833
.051	-.252				.916				.40	-.139	-.068	.860	.828
.068	-.227	-.179	-.134	-.135	.900	.878	.860	.858	.45	-.139	-.054	.860	.821
.085	-.202				.899				.50	-.132	-.043	.857	.816
.102	-.183				.880				.55	I		I	
.136	-.177	-.151	-.117	-.116	.877	.865	.852	.849	.60	-.089	-.041	.837	.815
.159	-.154	-.152	-.107	-.084	.867	.866	.847	.835	.65	-.046		.818	
.258	-.123	-.120	-.088	-.083	.853	.852	.837	.835	.70	-.018	-.030	.806	.811
.300	-.089	-.083	-.061	-.058	.837	.835	.825	.823	.75	.009		.793	
.400	-.068	-.076	-.061	-.064	.828	.831	.824	.826	.80	.011	-.018	.792	.805
.500	-.078	-.077	-.074	-.081	.832	.832	.831	.834	.85	.008		.794	
.600	-.072	-.081	-.088	-.092	.830	.834	.837	.838	.90	.001		.797	
.700	-.068	-.084	-.094	-.105	.828	.835	.840	.846					
.800	-.056	-.071	-.094	-.115	.823	.829	.840	.850					
.900	-.039	-.060	-.081	-.095	.815	.824	.834	.841					
.950	-.025	-.045	-.064	-.084	.809	.817	.826	.836					
.980	-.011	-.030	-.048	-.067	.802	.811	.819	.829					

TABLE VI. - Continued

(i) $M_\infty = 0.80$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.130	I	I			I	I			0.00	-.094	-.054	.841	.823
0.000	-.754				.163				.05	-.051		.822	
.008	-.369				.967				.10	-.066	-.071	.829	.831
.015	-.277	-.273	-.272	-.294	.925	.923	.923	.933	.15	-.104		.846	
.021	-.255				.915				.20	-.082	-.080	.836	.835
.028	-.242				.908				.25	-.083	-.070	.836	.830
.034	-.246	-.248	-.250	-.236	.911	.911	.913	.906	.30	-.110	-.035	.849	.815
.042	-.219				.898				.35	-.125	-.064	.855	.828
.051	-.217				.897				.40	-.137	-.057	.861	.825
.068	-.189	-.175	-.172	-.177	.884	.878	.877	.879	.45	-.131	-.043	.858	.818
.085	-.171				.876				.50	-.126	-.035	.856	.815
.102	-.160				.871				.55	I		I	
.136	-.156	-.144	-.130	-.134	.870	.864	.858	.859	.60	-.084	-.044	.837	.819
.169	-.139	-.152	-.114	-.093	.862	.866	.850	.841	.65	-.046		.819	
.258	-.123	-.113	-.092	-.091	.854	.850	.841	.836	.70	-.025	-.026	.810	.810
.300	-.089	-.080	-.050	-.055	.839	.835	.826	.824	.75	.007		.796	
.400	-.067	-.068	-.057	-.062	.829	.830	.825	.827	.80	.012	-.024	.794	.810
.500	-.078	-.072	-.071	-.078	.834	.832	.831	.834	.85	.005		.797	
.600	-.075	-.075	-.081	-.088	.833	.833	.835	.838	.90	-.001		.799	
.700	-.070	-.082	-.088	-.101	.830	.836	.839	.845					
.800	-.063	-.067	-.083	-.103	.827	.829	.837	.845					
.900	-.043	-.053	-.071	-.087	.818	.823	.831	.838					
.950	-.032	-.037	-.059	-.079	.813	.816	.825	.835					
.980	-.016	-.023	-.046	-.062	.806	.809	.820	.827					

(j) $M_\infty = 0.80$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.130	I	I			I	I			0.00	-.091	-.054	.840	.823
0.000	-.023				.812				.05	-.046		.820	
.008	-.145				.865				.10	-.040	-.057	.817	.825
.015	-.111	-.279	-.305	-.393	.849	.926	.938	.979	.15	-.090		.840	
.021	-.128				.857				.20	-.069	-.060	.830	.826
.028	-.143				.863				.25	-.073	-.047	.832	.820
.034	-.167	-.248	-.304	-.280	.874	.912	.937	.926	.30	-.087	-.018	.838	.807
.042	-.148				.866				.35	-.102	-.033	.845	.814
.051	-.154				.869				.40	-.107	-.025	.848	.811
.068	-.135	-.178	-.203	-.213	.860	.880	.891	.896	.45	-.105	-.018	.846	.808
.085	-.131				.858				.50	-.102	-.016	.845	.807
.102	-.129				.857				.55	I		I	
.136	-.137	-.151	-.146	-.144	.861	.867	.865	.865	.60	-.069	-.032	.830	.813
.159	-.128	-.161	-.128	-.104	.856	.871	.857	.846	.65	-.033		.814	
.258	-.117	-.115	-.095	-.082	.852	.851	.842	.836	.70	-.007	-.016	.802	.806
.300	-.083	-.082	-.060	-.053	.836	.836	.826	.823	.75	.018		.791	
.400	-.067	-.071	-.056	-.055	.829	.831	.824	.824	.80	.022	-.008	.789	.803
.500	-.078	-.076	-.066	-.068	.834	.833	.829	.830	.85	.017		.791	
.600	-.075	-.077	-.075	-.083	.833	.834	.833	.837	.90	.009		.795	
.700	-.074	-.080	-.082	-.092	.832	.835	.836	.840					
.800	-.058	-.066	-.080	-.096	.829	.829	.835	.842					
.900	-.049	-.055	-.068	-.081	.821	.824	.829	.836					
.950	-.037	-.041	-.055	-.069	.816	.817	.824	.830					
.980	-.023	-.026	-.042	-.055	.809	.811	.818	.824					

TABLE VI. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.089	-.054	.841	.824
0.000	.433				.601				.05	-.046		.821	
.008	.080				.764				.10	-.056	-.057	.825	.826
.015	.049	-.290	-.837	-1.064	.778	.933	1.205	1.339	.15	-.084		.838	
.021	.001				.800				.20	-.060	-.049	.827	.822
.028	-.035				.816				.25	-.061	-.035	.828	.816
.034	-.071	-.248	-.337	-.241	.832	.914	.954	.910	.30	-.079	-.004	.836	.803
.042	-.073				.834				.35	-.084	-.016	.838	.808
.051	-.084				.839				.40	-.085	-.010	.839	.805
.068	-.083	-.192	-.232	-.228	.838	.888	.905	.904	.45	-.089	-.004	.840	.802
.085	-.093				.843				.50	-.083		.838	.802
.102	-.095				.843				.55	I		I	
.136	-.114	-.163	-.161	-.155	.853	.874	.873	.871	.60	-.059	-.026	.827	.812
.169	-.111	-.174	-.138	-.115	.851	.879	.863	.853	.65	-.027		.812	
.258	-.110	-.128	-.101	-.082	.850	.858	.846	.838	.70	-.002	-.003	.801	.804
.300	-.073	-.094	-.066	-.053	.835	.843	.830	.824	.75	.025		.789	
.400	-.059	-.080	-.054	-.052	.827	.837	.825	.824	.80	.029	-.006	.787	.803
.500	-.072	-.083	-.063	-.065	.833	.838	.829	.830	.85	.020		.792	
.600	-.075	-.083	-.074	-.073	.834	.838	.834	.834	.90	.011		.796	
.700	-.076	-.088	-.078	-.083	.835	.841	.836	.838					
.800	-.069	-.073	-.076	-.085	.831	.834	.835	.839					
.900	-.055	-.065	-.065	-.070	.825	.830	.830	.832					
.950	-.047	-.049	-.054	-.061	.822	.823	.824	.828					
.980	-.028	-.034	-.042	-.049	.813	.816	.819	.822					

(l) $M_\infty = 0.80$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.062	-.041	.828	.818
0.000	.898				.348				.05	-.033		.815	
.008	.439				.613				.10	-.032	-.042	.814	.819
.015	.306	-.297	-1.192	-1.010	.661	.935	1.420	1.302	.15	-.061		.828	
.021	.225				.698				.20	-.039	-.023	.817	.810
.028	.166				.725				.25	-.037	-.010	.817	.804
.034	.114	-.285	-.463	-.930	.749	.930	1.013	1.184	.30	-.043	.013	.819	.794
.042	.093				.758				.35	-.052	.010	.823	.796
.051	.055				.775				.40	-.051	.016	.823	.793
.068	.031	-.236	-.350	-.463	.786	.907	.960	1.014	.45	-.054	.017	.824	.792
.085	.003				.798				.50	-.051	.016	.823	.793
.102	-.017				.808				.55	I		I	
.136	-.052	-.210	-.208	-.166	.823	.895	.895	.875	.60	-.038	-.011	.817	.806
.169	-.061	-.235	-.166	-.109	.827	.907	.875	.850	.65	-.008		.803	
.258	-.077	-.170	-.114	-.071	.835	.877	.851	.832	.70	.007	-.001	.797	.801
.300	-.052	-.133	-.070	-.044	.824	.860	.831	.820	.75	.034		.784	
.400	-.038	-.121	-.059	-.043	.817	.854	.826	.820	.80	.033	.005	.785	.797
.500	-.057	-.119	-.064	-.055	.826	.854	.829	.825	.85	.024		.789	
.600	-.062	-.122	-.072	-.060	.828	.855	.832	.827	.90	.020		.791	
.700	-.065	-.124	-.075	-.071	.830	.856	.834	.832					
.800	-.061	-.110	-.074	-.075	.827	.850	.833	.834					
.900	-.051	-.097	-.061	-.061	.823	.844	.827	.827					
.950	-.042	-.081	-.050	-.054	.819	.837	.823	.824					
.980	-.030	-.066	-.042	-.048	.813	.830	.819	.822					

TABLE VI. - Continued

(m) $M_\infty = 0.85$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.086	-.051	.891	.873
0.000	-.749				1.245				.05	-.044		.870	
.008	-.428				1.064				.10	-.063	-.061	.879	.878
.015	-.317	-.302	-.290	-.325	1.006	.998	.992	1.009	.15	-.099		.897	
.021	-.285				.990				.20	-.077	-.071	.886	.882
.028	-.274				.983				.25	-.079	-.059	.887	.877
.034	-.273	-.278	-.272	-.274	.983	.985	.983	.983	.30	-.104	-.022	.899	.858
.042	-.243				.967				.35	-.123	-.053	.908	.873
.051	-.241				.967				.40	-.126	-.042	.910	.868
.068	-.200	-.189	-.193	-.188	.947	.940	.943	.940	.45	-.124	-.028	.908	.861
.085	-.182				.937				.50	-.126	-.024	.909	.860
.102	-.178				.935				.55	I		I	
.136	-.171	-.156	-.142	-.142	.932	.924	.918	.918	.60	-.079	-.033	.886	.864
.169	-.154	-.165	-.125	-.103	.923	.928	.909	.898	.65	-.039		.867	
.258	-.131	-.119	-.097	-.089	.912	.906	.896	.891	.70	-.012	-.023	.854	.859
.300	-.093	-.082	-.062	-.060	.893	.888	.878	.877	.75	.023		.837	
.400	-.069	-.070	-.060	-.062	.882	.882	.878	.878	.80	.025	-.009	.836	.853
.500	-.083	-.075	-.074	-.084	.889	.884	.884	.889	.85	.017		.839	
.600	-.081	-.084	-.084	-.093	.887	.889	.889	.893	.90	.011		.842	
.700	-.075	-.085	-.097	-.107	.884	.885	.885	.900					
.800	-.069	-.069	-.089	-.111	.882	.882	.891	.902					
.900	-.047	-.059	-.078	-.093	.871	.877	.886	.893					
.950	-.034	-.042	-.064	-.083	.865	.868	.879	.888					
.980	-.015	-.027	-.048	-.062	.856	.861	.871	.878					

(n) $M_\infty = 0.90$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.100	-.063	.953	.932
0.000	-.966				1.514				.05	-.053		.925	
.008	-.805				1.378				.10	-.075	-.084	.937	.943
.015	-.739	-.340	-.184	-.186	1.331	1.083	.998	.997	.15	-.123		.963	
.021	-.659				1.277				.20	-.106	-.102	.953	.952
.028	-.644				1.267				.25	-.114	-.097	.957	.949
.034	-.638	-.311	-.218	-.238	1.262	1.066	1.013	1.010	.30	-.144	-.050	.973	.925
.042	-.592				1.232				.35	-.161	-.088	.983	.946
.051	-.521				1.188				.40	-.168	-.076	.987	.939
.068	-.230	-.236	-.180	-.177	1.020	1.025	.993	.992	.45	-.163	-.058	.984	.928
.085	-.109				.955				.50	-.162	-.045	.983	.922
.102	-.152				.978				.55	I		I	
.136	-.189	-.178	-.144	-.147	.998	.993	.974	.976	.60	-.107	-.047	.954	.922
.169	-.177	-.173	-.130	-.104	.992	.991	.966	.953	.65	-.060		.930	
.258	-.143	-.133	-.105	-.098	.974	.969	.953	.949	.70	-.034	-.032	.916	.915
.300	-.098	-.089	-.071	-.071	.950	.945	.934	.935	.75	.006		.895	
.400	-.071	-.080	-.065	-.070	.935	.941	.932	.934	.80	.008	-.026	.895	.911
.500	-.039	-.086	-.086	-.094	.946	.944	.943	.947	.85	-.005		.901	
.600	-.088	-.092	-.097	-.108	.945	.948	.948	.955	.90	-.007		.902	
.700	-.082	-.098	-.110	-.120	.942	.950	.956	.961					
.800	-.066	-.082	-.102	-.129	.933	.941	.951	.966					
.900	-.044	-.066	-.094	-.109	.922	.933	.947	.955					
.950	-.028	-.046	-.073	-.095	.913	.922	.936	.948					
.980	-.013	-.029	-.055	-.073	.906	.913	.927	.936					

TABLE VI. - Continued

(o) $M_\infty = 0.90$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.091	-.055	.945	.926
0.000	-.697				1.302				.05	-.044		.920	
.008	-.470				1.157				.10	-.047	-.069	.922	.933
.015	-.409	-.364	-.301	-.412	1.121	1.096	1.060	1.123	.15	-.104		.952	
.021	-.380				1.104				.20	-.086	-.072	.942	.936
.028	-.372				1.099				.25	-.100	-.063	.950	.930
.034	-.332	-.301	-.300	-.306	1.076	1.059	1.059	1.063	.30	-.109	-.017	.955	.906
.042	-.278				1.046				.35	-.129	-.050	.966	.923
.051	-.279				1.047				.40	-.131	-.038	.966	.917
.068	-.212	-.219	-.202	-.202	1.010	1.015	1.005	1.005	.45	-.135	-.023	.968	.910
.085	-.196				1.001				.50	-.125	-.016	.963	.906
.102	-.191				.999				.55	I		I	
.136	-.195	-.182	-.159	-.158	1.001	.995	.981	.982	.60	-.079	-.030	.939	.913
.159	-.172	-.178	-.141	-.112	.989	.992	.972	.956	.65	-.034		.915	
.258	-.141	-.133	-.109	-.098	.972	.967	.955	.949	.70	-.009	-.010	.902	.905
.300	-.098	-.087	-.067	-.066	.948	.943	.932	.932	.75	.026		.884	
.400	-.075	-.075	-.065	-.069	.937	.937	.932	.933	.80	.032	-.009	.881	.902
.500	-.092	-.083	-.079	-.090	.946	.941	.938	.944	.85	.023		.886	
.600	-.088	-.088	-.096	-.100	.944	.944	.948	.950	.90	.012		.892	
.700	-.089	-.093	-.102	-.113	.945	.946	.951	.957					
.800	-.074	-.078	-.097	-.118	.936	.939	.948	.960					
.900	-.054	-.064	-.086	-.101	.926	.930	.943	.951					
.950	-.038	-.045	-.065	-.086	.918	.921	.931	.943					
.980	-.020	-.028	-.043	-.066	.908	.912	.922	.932					

(p) $M_\infty = 0.90$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.107	-.074	.954	.938
0.000	-.091				.946				.05	-.057		.928	
.008	-.171				.988				.10	-.073	-.077	.936	.939
.015	-.135	-.361	-.565	-.672	.970	1.097	1.216	1.289	.15	-.111		.957	
.021	-.167				.987				.20	-.085	-.069	.943	.934
.028	-.184				.996				.25	-.085	-.057	.943	.928
.034	-.207	-.314	-.480	-.584	1.008	1.068	1.164	1.232	.30	-.110	-.017	.956	.909
.042	-.198				1.004				.35	-.124	-.037	.963	.919
.051	-.229				1.020				.40	-.126	-.026	.965	.914
.068	-.177	-.233	-.246	-.193	.992	1.023	1.030	1.003	.45	-.124	-.017	.963	.909
.085	-.170				.988				.50	-.120	-.021	.962	.911
.102	-.172				.990				.55	I		I	
.136	-.185	-.178	-.167	-.161	.998	.993	.987	.985	.60	-.077	-.036	.940	.919
.169	-.159	-.186	-.146	-.121	.984	.998	.975	.964	.65	-.043		.923	
.258	-.142	-.138	-.108	-.096	.975	.971	.955	.950	.70	-.013	-.017	.907	.909
.300	-.096	-.089	-.070	-.059	.950	.945	.935	.931	.75	.023		.888	
.400	-.072	-.077	-.064	-.060	.938	.939	.931	.932	.80	.027	-.008	.885	.905
.500	-.091	-.085	-.077	-.032	.946	.945	.939	.943	.85	.017		.890	
.600	-.091	-.088	-.088	-.094	.947	.946	.945	.950	.90	.008		.895	
.700	-.087	-.095	-.098	-.112	.944	.950	.950	.959					
.800	-.081	-.081	-.097	-.109	.941	.943	.951	.957					
.900	-.054	-.071	-.078	-.091	.932	.937	.941	.948					
.950	-.045	-.049	-.054	-.077	.922	.925	.934	.941					
.980	-.026	-.030	-.046	-.058	.912	.916	.924	.931					

TABLE VI. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.091	-.062	.945	.931
0.000	.412				.685				.05	-.046		.921	
.008	.070				.851				.10	-.047	-.059	.922	.931
.015	.047	-.344	-.743	-.843	.873	1.084	1.331	1.413	.15	-.089		.944	
.021	-.004				.900				.20	-.066	-.045	.933	.924
.028	-.051				.925				.25	-.066	-.031	.932	.916
.034	-.094	-.329	-.644	-.770	.947	1.075	1.266	1.359	.30	-.083	.002	.941	.899
.042	-.099				.950				.35	-.096	-.006	.948	.903
.051	-.131				.967				.40	-.095	.004	.947	.898
.058	-.121	-.277	-.424	-.548	.962	1.047	1.130	1.210	.45	-.097	.005	.949	.898
.085	-.133				.968				.50	-.093	.004	.945	.898
.102	-.139				.972				.55	I		I	
.136	-.153	-.189	-.146	-.116	.979	.999	.975	.962	.60	-.056	-.019	.927	.910
.159	-.141	-.196	-.141	-.102	.972	1.002	.973	.954	.65	-.019		.907	
.258	-.134	-.146	-.109	-.087	.968	.977	.955	.946	.70	.005	-.002	.895	.902
.300	-.091	-.098	-.068	-.056	.945	.952	.933	.930	.75	.040		.877	
.400	-.065	-.086	-.064	-.057	.932	.946	.931	.930	.80	.043	.004	.875	.898
.500	-.086	-.095	-.075	-.076	.943	.950	.937	.940	.85	.036		.879	
.600	-.084	-.097	-.088	-.086	.942	.952	.945	.945	.90	.019		.889	
.700	-.091	-.101	-.094	-.098	.946	.954	.948	.952					
.800	-.083	-.091	-.086	-.099	.942	.948	.943	.952					
.900	-.067	-.076	-.072	-.079	.935	.940	.935	.942					
.950	-.052	-.058	-.057	-.069	.927	.930	.927	.937					
.980	-.031	-.040	-.043	-.057	.917	.921	.920	.931					

(r) $M_\infty = 0.90$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.070	-.056	.937	.929
0.000	.897				.408				.05	-.034		.918	
.008	.426				.680				.10	-.043	-.051	.922	.927
.015	.326	-.282	-.937	-1.074	.731	1.053	1.488	1.614	.15	-.073		.939	
.021	.240				.776				.20	-.044	-.027	.923	.915
.028	.179				.807				.25	-.046	-.008	.925	.905
.034	.118	-.315	-.854	-.995	.839	1.071	1.421	1.539	.30	-.057	.015	.930	.893
.042	.087				.855				.35	-.063	.015	.933	.892
.051	.048				.875				.40	-.063	.026	.933	.887
.068	.015	-.327	-.650	-.860	.893	1.078	1.262	1.427	.45	-.061	.029	.932	.885
.085	-.018				.910				.50	-.055	.021	.929	.890
.102	-.045				.924				.55	I		I	
.136	-.096	-.357	-.179	-.102	.951	1.095	.995	.954	.60	-.040	-.011	.921	.906
.169	-.106	-.318	-.101	-.042	.956	1.072	.953	.923	.65	-.008		.904	
.258	-.115	-.185	-.098	-.054	.961	.999	.952	.929	.70	.014	.002	.893	.899
.300	-.068	-.140	-.063	-.033	.936	.975	.933	.918	.75	.044		.878	
.400	-.047	-.122	-.062	-.042	.925	.965	.933	.923	.80	.046	.009	.877	.896
.500	-.053	-.134	-.074	-.062	.937	.971	.939	.933	.85	.034		.883	
.600	-.074	-.135	-.082	-.074	.943	.972	.944	.939	.90	.025		.887	
.700	-.079	-.138	-.086	-.087	.942	.973	.946	.946					
.800	-.078	-.121	-.085	-.037	.941	.965	.945	.946					
.900	-.069	-.110	-.070	-.068	.936	.959	.937	.936					
.950	-.058	-.089	-.054	-.063	.931	.947	.931	.933					
.980	-.033	-.070	-.043	-.052	.913	.937	.923	.927					

TABLE VI. - Continued

(s) $M_\infty = 0.92$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.094	-.061	.969	.951
0.000	-.611				1.281				.05	-.047		.943	
.008	-.437				1.167				.10	-.052	-.075	.946	.959
.015	-.391	-.344	-.293	-.407	1.139	1.110	1.081	1.149	.15	-.105		.975	
.021	-.378				1.131				.20	-.088	-.079	.966	.961
.028	-.396				1.143				.25	-.092	-.064	.968	.953
.034	-.387	-.313	-.356	-.361	1.137	1.092	1.118	1.121	.30	-.117	-.020	.982	.929
.042	-.328				1.102				.35	-.136	-.045	.992	.942
.051	-.314				1.094				.40	-.142	-.034	.996	.937
.068	-.275	-.288	-.274	-.280	1.071	1.077	1.070	1.075	.45	-.134	-.016	.991	.927
.085	-.212				1.035				.50	-.131	-.017	.989	.928
.102	-.184				1.019				.55	I		I	
.136	-.215	-.187	-.163	-.161	1.037	1.019	1.007	1.006	.60	-.082	-.027	.963	.933
.169	-.180	-.184	-.145	-.118	1.017	1.019	.997	.983	.65	-.042		.940	
.258	-.149	-.139	-.114	-.098	.999	.994	.980	.971	.70	-.005	-.009	.921	.923
.300	-.093	-.089	-.069	-.069	.971	.967	.955	.955	.75	.034		.899	
.400	-.071	-.076	-.068	-.067	.956	.960	.955	.955	.80	.036	-.007	.898	.922
.500	-.092	-.088	-.084	-.093	.967	.966	.964	.969	.85	.028		.903	
.600	-.089	-.092	-.096	-.104	.966	.968	.970	.974	.90	.013		.910	
.700	-.091	-.098	-.109	-.119	.966	.972	.977	.981					
.800	-.078	-.080	-.104	-.121	.961	.962	.975	.982					
.900	-.058	-.069	-.091	-.103	.950	.956	.968	.973					
.950	-.041	-.046	-.071	-.087	.941	.943	.956	.963					
.980	-.019	-.029	-.052	-.068	.929	.933	.946	.955					

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.074	-.062	.984	.976
0.000	-.845				1.513				.05	-.034		.962	
.008	-.696				1.388				.10	-.052	-.065	.972	.978
.015	-.647	-.324	-.145	-.161	1.350	1.130	1.025	1.033	.15	-.102		1.001	
.021	-.572				1.296				.20	-.090	-.080	.994	.987
.028	-.562				1.289				.25	-.106	-.064	1.003	.978
.034	-.570	-.313	-.222	-.195	1.295	1.123	1.070	1.051	.30	-.129	-.021	1.016	.954
.042	-.538				1.272				.35	-.146	-.060	1.025	.974
.051	-.499				1.244				.40	-.157	-.044	1.032	.965
.068	-.458	-.306	-.257	-.257	1.217	1.119	1.092	1.088	.45	-.150	-.022	1.028	.953
.085	-.420				1.192				.50	-.144	-.011	1.024	.947
.102	-.354				1.150				.55	I		I	
.136	-.262	-.279	-.232	-.231	1.094	1.103	1.076	1.073	.60	-.074	-.019	.983	.952
.169	-.178	-.248	-.188	-.144	1.043	1.084	1.050	1.022	.65	-.036		.962	
.258	-.148	-.139	-.110	-.106	1.026	1.020	1.005	1.000	.70	.002	-.001	.941	.942
.300	-.083	-.089	-.070	-.070	.988	.992	.982	.980	.75	.037		.922	
.400	-.059	-.078	-.067	-.070	.981	.985	.981	.980	.80	.040	.005	.919	.938
.500	-.098	-.099	-.093	-.104	.997	.997	.995	.999	.85	.032		.924	
.600	-.096	-.106	-.115	-.114	.995	1.000	1.008	1.005	.90	.023		.929	
.700	-.095	-.115	-.128	-.134	.995	1.005	1.015	1.017					
.800	-.080	-.097	-.120	-.140	.987	.995	1.011	1.020					
.900	-.050	-.078	-.103	-.119	.969	.984	.999	1.008					
.950	-.034	-.056	-.082	-.100	.961	.972	.988	.997					
.980	-.009	-.031	-.054	-.079	.947	.958	.972	.985					

TABLE VI. - Continued

(u) $M_\infty = 0.94$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.090	-.075	.991	.982
0.000	-.572				1.290				.05	-.051		.969	
.008	-.429				1.194				.10	-.065	-.077	.977	.983
.015	-.365	-.347	-.267	-.338	1.154	1.142	1.093	1.167	.15	-.114		1.004	
.021	-.349				1.143				.20	-.097	-.079	.994	.984
.028	-.380				1.153				.25	-.102	-.062	.997	.975
.034	-.382	-.307	-.352	-.352	1.164	1.117	1.145	1.145	.30	-.123	-.016	1.009	.949
.042	-.334				1.134				.35	-.145	-.046	1.022	.965
.051	-.318				1.124				.40	-.148		1.024	.956
.058	-.306	-.308	-.295	-.293	1.117	1.118	1.110	1.108	.45	-.141	-.016	1.019	.948
.085	-.284				1.103				.50	-.142	-.012	1.020	.946
.102	-.261				1.089				.55	I		I	
.136	-.258	-.245	-.248	-.229	1.088	1.080	1.082	1.070	.60	-.079	-.030	.984	.957
.159	-.198	-.208	-.170	-.116	1.052	1.058	1.036	1.005	.65	-.036		.960	
.258	-.171	-.150	-.121	-.106	1.037	1.024	1.008	.999	.70	-.008	-.012	.944	.946
.300	-.090	-.085	-.067	-.067	.990	.988	.978	.977	.75	.031		.923	
.400	-.074	-.074	-.068	-.066	.981	.981	.978	.977	.80	.040	-.003	.918	.941
.500	-.098	-.091	-.089	-.096	.995	.990	.990	.993	.85	.025		.926	
.600	-.101	-.097	-.103	-.107	.997	.994	.998	1.000	.90	.015		.932	
.700	-.095	-.105	-.120	-.126	.994	.998	1.007	1.010					
.800	-.089	-.089	-.113	-.132	.993	.989	1.003	1.014					
.900	-.060	-.072	-.093	-.109	.973	.980	.992	1.000					
.950	-.042	-.052	-.070	-.091	.963	.969	.979	.990					
.980	-.018	-.027	-.052	-.069	.950	.954	.969	.978					

(v) $M_\infty = 0.94$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.098	-.079	.994	.984
0.000	-.080				.984				.05	-.055		.970	
.008	-.156				1.033				.10	-.063	-.077	.975	.983
.015	-.124	-.337	-.492	-.592	1.009	1.135	1.235	1.303	.15	-.111		1.002	
.021	-.147				1.022				.20	-.089	-.064	.990	.975
.028	-.171				1.036				.25	-.092	-.048	.991	.966
.034	-.199	-.315	-.466	-.545	1.052	1.122	1.217	1.271	.30	-.114	-.007	1.004	.943
.042	-.189				1.047				.35	-.125	-.027	1.010	.955
.051	-.205				1.056				.40	-.132	-.014	1.014	.947
.058	-.243	-.296	-.371	-.426	1.078	1.110	1.157	1.191	.45	-.122	-.004	1.008	.941
.085	-.239				1.076				.50	-.119	-.006	1.007	.942
.102	-.210				1.059				.55	I		I	
.136	-.233	-.256	-.278	-.212	1.072	1.086	1.099	1.059	.60	-.071	-.028	.979	.955
.169	-.212	-.217	-.132	-.085	1.050	1.063	1.014	.986	.65	-.033		.958	
.258	-.155	-.141	-.105	-.092	1.027	1.019	.998	.991	.70	-.005	-.010	.942	.945
.300	-.084	-.082	-.062	-.057	.986	.985	.975	.971	.75	.038		.919	
.400	-.069	-.075	-.061	-.062	.978	.981	.974	.974	.80	.038	-.002	.919	.940
.500	-.098	-.091	-.086	-.088	.994	.990	.987	.988	.85	.026		.925	
.600	-.101	-.099	-.096	-.103	.996	.995	.993	.997	.90	.017		.930	
.700	-.099	-.107	-.110	-.120	.995	.999	1.001	1.006					
.800	-.092	-.090	-.105	-.120	.991	.990	.998	1.007					
.900	-.070	-.075	-.086	-.095	.979	.981	.988	.993					
.950	-.047	-.052	-.064	-.081	.966	.968	.975	.984					
.980	-.025	-.029	-.045	-.061	.953	.955	.965	.974					

TABLE VI. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.091	-.082	.991	.986
0.000	.423				.711				.05	-.050		.968	
.008	.092				.890				.10	-.066	-.078	.977	.983
.015	.053	-.304	-.648	-.745	.905	1.115	1.346	1.424	.15	-.108		1.001	
.021	.006				.937				.20	-.086	-.060	.988	.973
.028	-.041				.963				.25	-.086	-.043	.988	.964
.034	-.082	-.312	-.590	-.691	.986	1.121	1.303	1.382	.30	-.102	-.005	.997	.945
.042	-.086				.988				.35	-.116	-.012	1.005	.949
.051	-.137				1.017				.40	-.119	-.003	1.007	.944
.068	-.129	-.324	-.442	-.551	1.013	1.128	1.202	1.279	.45	-.111	.003	1.002	.940
.085	-.137				1.017				.50	-.108	.002	1.001	.941
.102	-.153				1.026				.55	I		I	
.136	-.215	-.313	-.376	-.377	1.062	1.121	1.160	1.163	.60	-.068	-.029	.978	.957
.169	-.203	-.348	-.230	-.119	1.055	1.143	1.071	1.009	.65	-.029		.956	
.258	-.233	-.126	-.081	-.055	1.073	1.011	.985	.972	.70	-.006	-.013	.943	.948
.300	-.086	-.072	-.042	-.035	.988	.980	.964	.961	.75	.035		.921	
.400	-.059	-.077	-.055	-.052	.973	.983	.971	.970	.80	.042	-.005	.917	.943
.500	-.089	-.099	-.080	-.077	.990	.997	.985	.984	.85	.027		.926	
.600	-.097	-.106	-.095	-.096	.995	1.001	.993	.994	.90	.014		.932	
.700	-.103	-.117	-.107	-.109	.997	1.008	1.000	1.002					
.800	-.092	-.099	-.101	-.114	.992	.997	.996	1.004					
.900	-.075	-.081	-.079	-.085	.982	.987	.984	.987					
.950	-.057	-.061	-.060	-.068	.972	.975	.973	.978					
.980	-.032	-.039	-.044	-.053	.958	.963	.965	.970					

(x) $M_\infty = 0.94$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.034	-.066	.959	.976
0.000	.914				.420				.05	-.011		.946	
.008	.447				.697				.10	-.029	-.057	.955	.971
.015	.348	-.237	-.843	-.970	.751	1.075	1.508	1.625	.15	-.076		.981	
.021	.252				.797				.20	-.051	-.027	.968	.955
.028	.195				.833				.25	-.052	-.012	.968	.947
.034	.141	-.279	-.776	-.906	.862	1.099	1.445	1.562	.30	-.065	.015	.976	.931
.042	.110				.879				.35	-.074	.016	.980	.931
.051	.066				.903				.40	-.078	.029	.983	.924
.068	.028	-.287	-.568	-.797	.924	1.105	1.287	1.464	.45	-.070	.029	.978	.924
.085	-.004				.942				.50	-.067	.024	.977	.926
.102	-.040				.961				.55	I		I	
.136	-.107	-.359	-.513	-.547	.999	1.149	1.248	1.272	.60	-.047	-.014	.965	.947
.169	-.125	-.449	-.481	-.349	1.009	1.206	1.227	1.143	.65	-.012		.946	
.258	-.229	-.395	-.060	-.019	1.070	1.172	.973	.951	.70	.011	.000	.934	.939
.300	-.172	-.120	-.013	-.009	1.037	1.007	.947	.935	.75	.046		.915	
.400	-.029	-.094	-.036	-.016	.956	.992	.959	.949	.80	.048	.009	.913	.934
.500	-.063	-.126	-.071	-.058	.974	1.010	.979	.972	.85	.040		.918	
.600	-.071	-.139	-.089	-.080	.979	1.018	.989	.984	.90	.025		.926	
.700	-.086	-.146	-.099	-.091	.987	1.022	.995	.990					
.800	-.086	-.129	-.095	-.092	.987	1.012	.992	.992					
.900	-.075	-.114	-.074	-.074	.982	1.003	.980	.981					
.950	-.058	-.090	-.058	-.063	.972	.990	.972	.975					
.980	-.037	-.068	-.042	-.053	.960	.977	.963	.969					

TABLE VI. - Continued

(y) $M_\infty = 0.96$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I			I	I			0.00	-.077	-.086	1.006	1.003
0.000	-.519				1.289				.05	-.333		.979	
.008	-.386				1.195				.10	-.053	-.073	.990	.999
.015	-.337	-.319	-.251	-.357	1.162	1.150	1.110	1.174	.15	-.108		1.023	
.021	-.324				1.154				.20	-.089	-.074	1.012	.997
.028	-.352				1.173				.25	-.117	-.052	1.027	.988
.034	-.366	-.293	-.330	-.324	1.191	1.129	1.158	1.153	.30	-.131	-.005	1.036	.962
.042	-.318				1.150				.35	-.147	-.035	1.045	.979
.051	-.298				1.137				.40	-.164	-.013	1.056	.967
.068	-.297	-.293	-.285	-.281	1.137	1.128	1.130	1.127	.45	-.141	-.034	1.041	.963
.085	-.283				1.128				.50	-.132	-.000	1.036	.961
.102	-.256				1.111				.55	I		I	
.136	-.266	-.269	-.257	-.277	1.117	1.112	1.118	1.126	.60	-.073	-.025	1.002	.975
.169	-.246	-.284	-.252	-.225	1.105	1.122	1.109	1.094	.65	-.034		.979	
.258	-.257	-.214	-.181	-.186	1.111	1.079	1.065	1.070	.70	-.005	.002	.963	.960
.300	-.134	-.120	-.073	-.097	1.037	1.024	1.002	1.017	.75	.044		.934	
.430	-.057	-.049	-.051	-.054	.992	.987	.989	.992	.80	.042	.003	.932	.959
.500	-.101	-.085	-.088	-.091	1.013	1.007	1.010	1.014	.85	.037		.935	
.600	-.103	-.098	-.107	-.116	1.014	1.016	1.022	1.028	.90	.022		.942	
.700	-.107	-.116	-.126	-.140	1.016	1.027	1.032	1.041					
.800	-.092	-.110	-.124	-.143	1.037	1.025	1.032	1.043					
.900	-.062	-.078	-.099	-.109	.990	1.006	1.017	1.023					
.950	-.036	-.051	-.074	-.095	.975	.991	1.002	1.015					
.980	-.011	-.022	-.055	-.056	.965	.974	.991	.998					

(z) $M_\infty = 0.98$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I			I	I			0.00	-.188	-.074	1.091	1.021
0.000	-.739				1.497				.05	-.110		1.044	
.008	-.618				1.394				.10	-.111	-.131	1.045	1.056
.015	-.554	-.262	-.082	-.122	1.343	1.137	1.027	1.050	.15	-.159		1.074	
.021	-.499				1.302				.20	-.139	-.055	1.062	1.010
.028	-.491				1.296				.25	-.143	-.048	1.064	1.005
.034	-.505	-.262	-.175	-.179	1.307	1.138	1.084	1.085	.30	-.176	.012	1.084	.971
.042	-.477				1.286				.35	-.197	-.048	1.098	1.006
.051	-.445				1.262				.40	-.217	-.028	1.110	.994
.068	-.406	-.253	-.195	-.206	1.234	1.131	1.096	1.101	.45	-.201	-.013	1.101	.989
.085	-.375				1.215				.50	-.153	-.007	1.070	.982
.102	-.325				1.179				.55	I		I	
.136	-.280	-.266	-.226	-.232	1.150	1.139	1.116	1.118	.60	-.066	-.018	1.017	.989
.169	-.236	-.285	-.225	-.201	1.120	1.152	1.115	1.099	.65	-.032		.997	
.258	-.272	-.260	-.223	-.206	1.144	1.136	1.114	1.103	.70	-.001	.002	.978	.977
.300	-.232	-.217	-.180	-.173	1.118	1.109	1.087	1.081	.75	.048		.950	
.400	-.123	-.143	-.141	-.145	1.051	1.063	1.063	1.064	.80	.050	.007	.949	.974
.500	-.127	-.139	-.135	-.147	1.054	1.060	1.059	1.066	.85	.037		.956	
.600	-.131	-.140	-.149	-.154	1.055	1.062	1.069	1.070	.90	.022		.964	
.700	-.127	-.158	-.159	-.147	1.053	1.072	1.074	1.066					
.800	-.075	-.159	-.119	-.145	1.022	1.073	1.050	1.063					
.900	-.033	-.072	-.095	-.132	.997	1.020	1.033	1.055					
.950	-.009	-.033	-.067	-.098	.983	.998	1.019	1.034					
.980	.013	-.011	-.045	-.061	.970	.984	1.004	1.012					

TABLE VI. - Continued

(aa) $M_\infty = 0.98$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.186	-.091	1.088	1.032
0.000	-.492				1.294				.05	-.114		1.044	
.008	-.356				1.198				.10	-.114	-.078	1.044	1.024
.015	-.307	-.293	-.227	-.317	1.166	1.156	1.114	1.173	.15	-.157		1.071	
.021	-.297				1.163				.20	-.133	-.069	1.057	1.018
.028	-.323				1.176				.25	-.136	-.048	1.058	1.006
.034	-.335	-.265	-.299	-.301	1.184	1.140	1.160	1.162	.30	-.165	.012	1.075	.971
.042	-.236				1.151				.35	-.192	-.033	1.092	.997
.051	-.274				1.144				.40	-.201	-.013	1.098	.986
.068	-.268	-.261	-.265	-.266	1.140	1.137	1.138	1.140	.45	-.159	-.000	1.072	.978
.085	-.269				1.141				.50	-.147	.002	1.067	.977
.102	-.242				1.127				.55	I		I	
.136	-.252	-.248	-.254	-.250	1.133	1.129	1.132	1.136	.60	-.062	-.027	1.014	.994
.169	-.224	-.276	-.242	-.218	1.113	1.147	1.124	1.109	.65	-.028		.993	
.258	-.272	-.257	-.218	-.199	1.142	1.135	1.109	1.097	.70	.005	-.005	.972	.981
.300	-.240	-.213	-.166	-.158	1.121	1.107	1.076	1.072	.75	.051		.947	
.400	-.142	-.133	-.130	-.131	1.061	1.057	1.054	1.057	.80	.050	.004	.949	.977
.500	-.134	-.134	-.130	-.135	1.058	1.058	1.054	1.060	.85	.040		.955	
.600	-.131	-.135	-.148	-.142	1.056	1.058	1.065	1.062	.90	.023		.965	
.700	-.143	-.152	-.116	-.149	1.064	1.069	1.049	1.066					
.800	-.096	-.126	-.116	-.180	1.035	1.053	1.049	1.084					
.900	-.058	-.050	-.088	-.089	1.012	1.007	1.029	1.031					
.950	-.026	-.032	-.055	-.066	.993	.997	1.009	1.017					
.980	.000	-.015	-.035	-.049	.978	.986	.997	1.007					

(bb) $M_\infty = 0.98$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.179	-.129	1.084	1.056
0.000	-.043				1.002				.05	-.109		1.041	
.008	-.121				1.048				.10	-.104	-.082	1.039	1.028
.015	-.077	-.268	-.423	-.514	1.023	1.143	1.241	1.313	.15	-.146		1.065	
.021	-.110				1.043				.20	-.129	-.041	1.054	1.004
.028	-.130				1.055				.25	-.131	-.023	1.055	.993
.034	-.155	-.263	-.411	-.473	1.070	1.140	1.235	1.283	.30	-.150	.030	1.067	.962
.042	-.153				1.069				.35	-.172	.001	1.080	.979
.051	-.160				1.073				.40	-.192	.013	1.094	.972
.068	-.174	-.243	-.331	-.382	1.083	1.127	1.182	1.219	.45	-.199	.018	1.099	.969
.085	-.197				1.098				.50	-.110	.014	1.045	.971
.102	-.191				1.095				.55	I		I	
.136	-.216	-.253	-.291	-.298	1.110	1.134	1.156	1.163	.60	-.046	-.015	1.007	.988
.169	-.203	-.292	-.267	-.234	1.103	1.159	1.140	1.121	.65	-.010		.985	
.258	-.268	-.274	-.215	-.191	1.144	1.147	1.107	1.093	.70	.023	.002	.966	.976
.300	-.245	-.215	-.153	-.147	1.129	1.109	1.071	1.064	.75	.063		.943	
.400	-.163	-.136	-.117	-.117	1.078	1.061	1.047	1.046	.80	.062	.013	.943	.970
.500	-.134	-.133	-.124	-.129	1.050	1.058	1.052	1.054	.85	.047		.953	
.600	-.134	-.132	-.135	-.143	1.059	1.058	1.060	1.062	.90	.035		.960	
.700	-.143	-.154	-.155	-.164	1.066	1.071	1.072	1.075					
.800	-.149	-.131	-.157	-.142	1.069	1.058	1.080	1.062					
.900	-.051	-.057	-.072	-.079	1.007	1.013	1.022	1.024					
.950	-.022	-.040	-.041	-.055	.993	1.002	1.004	1.010					
.980	.001	-.016	-.018	-.036	.979	.986	.991	.998					

TABLE VI. - Concluded

(cc) $M_\infty = 0.98$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I							
0.000	.451					.725				0.00	-.178	-.138	1.086	1.039
.008	.130					.904				.05	-.112		1.045	
.015	.103	-.266	-.567	-.571		.920	1.139	1.353	1.436	.10	-.113	-.086	1.046	1.028
.021	.045					.952				.15	-.146		1.066	
.028	.006					.974				.20	-.123	-.025	1.051	.992
.034	-.035	-.260	-.525	-.620		.999	1.136	1.321	1.391	.25	-.128	-.019	1.054	.989
.042	-.044					1.004				.30	-.146	.026	1.066	.963
.051	-.100					1.038				.35	-.157	.003	1.072	.975
.068	-.098	-.269	-.394	-.495		1.034	1.142	1.227	1.297	.40	-.123	.321	1.050	.966
.085	-.107					1.041				.45	-.097	.029	1.035	.961
.102	-.113					1.045				.50	-.078	.019	1.024	.966
.136	-.173	-.272	-.354	-.364		1.081	1.143	1.199	1.204	.55	I		I	
.169	-.174	-.325	-.314	-.273		1.082	1.178	1.171	1.144	.60	-.035	-.011	.999	.984
.258	-.258	-.317	-.228	-.183		1.134	1.173	1.116	1.087	.65	-.006		.981	
.300	-.244	-.247	-.162	-.142		1.126	1.127	1.075	1.062	.70	.022	.001	.965	.977
.400	-.195	-.147	-.116	-.111		1.094	1.065	1.047	1.044	.75	.057		.944	
.500	-.142	-.148	-.125	-.123		1.062	1.066	1.051	1.051	.80	.061	.009	.942	.974
.600	-.134	-.145	-.132	-.138		1.057	1.063	1.057	1.059	.85	.046		.951	
.700	-.146	-.157	-.154	-.157		1.065	1.072	1.069	1.071	.90	.030		.960	
.800	-.153	-.143	-.149	-.141		1.068	1.063	1.066	1.061					
.900	-.066	-.059	-.067	-.068		1.016	1.012	1.017	1.017					
.950	-.023	-.029	-.032	-.054		.991	.994	.996	1.009					
.980	-.005	-.008	-.015	-.040		.980	.982	.986	1.002					

(dd) $M_\infty = 0.98$, $\alpha = 8.5^\circ$, and $\dot{m}/\dot{m}_\infty = 0.82$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I	I							
0.000	.947					.422				0.00	-.154	-.137	1.074	1.057
.008	.489					.705				.05	-.088		1.035	
.015	.390	-.199	-.746	-.875		.761	1.089	1.510	1.634	.10	-.088	-.128	1.035	1.052
.021	.305					.809				.15	-.131		1.061	
.028	.244					.843				.20	-.102	-.004	1.044	.981
.034	.187	-.229	-.677	-.810		.875	1.115	1.450	1.566	.25	-.106	.015	1.046	.970
.042	.155					.894				.30	-.130	.057	1.061	.946
.051	.109					.920				.35	-.146	.048	1.071	.951
.068	.068	-.238	-.489	-.709		.942	1.120	1.299	1.472	.40	-.129	.055	1.059	.947
.085	.031					.961				.45	-.064	.057	1.016	.945
.102	-.001					.980				.50	-.047	.051	1.007	.949
.136	-.081	-.312	-.450	-.494		1.026	1.167	1.271	1.297	.55	I		I	
.169	-.096	-.400	-.429	-.423		1.033	1.224	1.257	1.246	.60	-.031	.010	.994	.973
.258	-.200	-.408	-.275	-.182		1.093	1.232	1.152	1.088	.65	.008		.970	
.300	-.197	-.395	-.179	-.130		1.094	1.228	1.091	1.060	.70	.025	.018	.962	.971
.400	-.187	-.206	-.113	-.092		1.098	1.103	1.051	1.036	.75	.062		.940	
.500	-.208	-.197	-.131	-.111		1.101	1.097	1.060	1.048	.80	.065	.022	.939	.969
.600	-.134	-.191	-.147	-.133		1.055	1.093	1.067	1.061	.85	.049		.947	
.700	-.137	-.206	-.149	-.155		1.057	1.103	1.068	1.074	.90	.038		.954	
.800	-.149	-.204	-.098	-.169		1.065	1.101	1.036	1.082					
.900	-.156	-.206	-.060	-.120		1.068	1.103	1.011	1.053					
.950	-.102	-.167	-.035	-.053		1.040	1.078	.994	1.013					
.980	-.114	-.120	-.023	-.036		1.047	1.053	.990	1.002					

TABLE VII. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 3

(a) $M_\infty = 0.40$, $\alpha = -2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.69$

X/L	CP AT PHI =				X/L	ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I	I	I	0.000	I	I	I	I	0.00	-.041	-.042	.407	.407
0.000	-1.110				.05	.595				.05	-.014		.401	
.008	-1.034				.10	.583				.10	-.016	-.025	.402	.404
.015	-.870	-.334	-.249	-.212	.15	.555	.461	.446	.438	.15	-.064		.412	
.021	-.581				.20	.506				.20	-.047	-.053	.408	.410
.028	-.363				.25	.466				.25	-.050	-.051	.409	.409
.034	-.273	-.257	-.212	-.170	.30	.450	.446	.439	.430	.30	-.084	-.041	.416	.407
.042	-.226				.35	.441				.35	-.104	-.063	.419	.412
.051	-.229				.40	.442				.40	-.106	-.052	.420	.410
.068	-.187	-.176	-.137	-.132	.45	.434	.431	.424	.423	.45	-.102	-.044	.419	.408
.085	-.174				.50	.431				.50	-.111	-.025	.421	.404
.102	-.166				.55	.430				.55	I		I	
.136	-.144	-.136	-.101	-.099	.60	.426	.423	.417	.415	.60	-.087	-.007	.416	.400
.169	-.135	-.134	-.095	-.075	.65	.424	.422	.416	.411	.65	-.050		.409	
.258	-.102	-.105	-.075	-.071	.70	.418	.417	.412	.410	.70	-.017	.003	.402	.398
.300	-.084	-.078	-.055	-.052	.75	.414	.412	.408	.406	.75	.028		.393	
.400	-.057	-.067	-.059	-.061	.80	.410	.410	.409	.408	.80	.028	.001	.392	.398
.500	-.069	-.070	-.066	-.075	.85	.410	.410	.410	.411	.85	.028		.393	
.600	-.066	-.067	-.077	-.087	.90	.409	.410	.412	.413	.90	.029		.393	
.700	-.062	-.070	-.081	-.095		.408	.410	.413	.415					
.800	-.051	-.063	-.075	-.104		.406	.408	.412	.417					
.900	-.038	-.059	-.067	-.087		.403	.408	.411	.414					
.950	-.029	-.047	-.059	-.083		.402	.405	.410	.413					
.980	-.023	-.042	-.057	-.076		.401	.404	.408	.411					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				X/L	ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I	I	I	0.000	I	I	I	I	0.00	-.070	-.064	.413	.411
0.000	-1.610				.05	.674				.05	-.036		.406	
.008	-.440				.10	.481				.10	-.039	-.046	.406	.408
.015	-.318	-.351	-.324	-.316	.15	.459	.465	.460	.458	.15	-.078		.414	
.021	-.288				.20	.453				.20	-.061	-.048	.411	.409
.028	-.254				.25	.446				.25	-.061	-.051	.411	.409
.034	-.243	-.259	-.246	-.223	.30	.446	.448	.445	.441	.30	-.083	-.034	.415	.405
.042	-.210				.35	.438				.35	-.101	-.053	.419	.409
.051	-.213				.40	.439				.40	-.108	-.051	.420	.409
.068	-.174	-.168	-.158	-.172	.45	.431	.431	.428	.431	.45	-.107	-.032	.420	.405
.085	-.165				.50	.429				.50	-.112	-.027	.421	.404
.102	-.150				.55	.427				.55	I		I	
.136	-.138	-.130	-.115	-.115	.60	.424	.423	.420	.420	.60	-.093	-.009	.418	.401
.169	-.131	-.128	-.106	-.087	.65	.423	.423	.418	.414	.65	-.055		.410	
.258	-.107	-.100	-.080	-.076	.70	.419	.417	.413	.412	.70	-.029	.001	.404	.398
.300	-.080	-.075	-.057	-.050	.75	.413	.412	.408	.407	.75	.020		.394	
.400	-.069	-.064	-.055	-.060	.80	.411	.410	.408	.408	.80	.036	-.004	.391	.399
.500	-.070	-.064	-.063	-.068	.85	.411	.409	.409	.410	.85	.036		.391	
.600	-.064	-.066	-.070	-.077	.90	.410	.410	.411	.413	.90	.026		.393	
.700	-.063	-.068	-.078	-.090		.409	.410	.413	.415					
.800	-.055	-.055	-.076	-.095		.408	.409	.412	.416					
.900	-.042	-.053	-.058	-.087		.405	.408	.411	.414					
.950	-.036	-.044	-.061	-.082		.404	.406	.410	.413					
.980	-.028	-.037	-.054	-.073		.403	.404	.408	.411					

TABLE VII. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.69$

X/L	CP AT PHI =				180	ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I	I	I	I	I	I	I	I	0.00	-.074	-.063	.412	.412
0.000	-1.157				.602					.05	-.035		.404	
.008	-.300				.455					.10	-.035	-.042	.404	.408
.015	-.206	-.351	-.525	-.781	.438	.465	.496	.540		.15	-.038		.405	
.021	-.184				.434					.20	-.043	-.039	.406	.406
.028	-.179				.432					.25	-.045	-.036	.406	.406
.034	-.174	-.255	-.263	-.236	.432	.447	.449	.443		.30	-.063	-.017	.410	.402
.042	-.161				.429					.35	-.081	-.033	.413	.406
.051	-.174				.431					.40	-.082	-.019	.413	.403
.068	-.140	-.173	-.181	-.174	.425	.431	.433	.431		.45	-.082	-.012	.413	.401
.085	-.128				.423					.50	-.096	-.005	.416	.400
.102	-.124				.422					.55	I		I	
.136	-.120	-.131	-.128	-.126	.421	.424	.423	.422		.60	-.074	.001	.412	.399
.169	-.117	-.136	-.112	-.095	.420	.424	.419	.415		.65	-.042		.407	
.258	-.099	-.104	-.084	-.076	.416	.417	.414	.412		.70	-.009	.011	.401	.397
.300	-.075	-.077	-.053	-.049	.412	.412	.409	.407		.75	.033		.392	
.400	-.063	-.065	-.054	-.058	.410	.410	.408	.409		.80	.049	.009	.389	.397
.500	-.068	-.065	-.057	-.065	.411	.410	.408	.410		.85	.045		.390	
.600	-.065	-.065	-.064	-.072	.410	.410	.410	.411		.90	.034		.392	
.700	-.065	-.068	-.072	-.084	.410	.411	.412	.414						
.800	-.061	-.057	-.072	-.084	.409	.409	.411	.414						
.900	-.048	-.053	-.065	-.076	.406	.407	.410	.412						
.950	-.042	-.045	-.053	-.072	.405	.406	.408	.411						
.980	-.032	-.040	-.052	-.066	.404	.405	.407	.410						

(d) $M_\infty = 0.40$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.69$

X/L	CP AT PHI =				180	ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I	I	I	I	I	I	I	I	0.00	-.098	-.093	.418	.417
0.000	-.432				.479					.05	-.055		.410	
.008	-.144				.425					.10	-.056	-.067	.409	.412
.015	-.133	-.354	-.992	-.906	.418	.465	.575	.561		.15	-.077		.414	
.021	-.099				.416					.20	-.063	-.057	.411	.410
.028	-.104				.418					.25	-.065	-.056	.411	.410
.034	-.115	-.262	-.341	-.657	.420	.448	.462	.519		.30	-.081	-.029	.415	.405
.042	-.096				.416					.35	-.094	-.040	.417	.407
.051	-.120				.421					.40	-.098	-.022	.418	.405
.068	-.090	-.182	-.194	-.170	.415	.433	.435	.431		.45	-.094	-.022	.417	.403
.085	-.094				.415					.50	-.100	-.019	.419	.402
.102	-.094				.416					.55	I		I	
.136	-.095	-.139	-.136	-.127	.416	.425	.424	.422		.60	-.089	-.020	.416	.403
.169	-.101	-.148	-.118	-.092	.417	.426	.420	.415		.65	-.062		.411	
.258	-.086	-.112	-.089	-.074	.414	.420	.415	.412		.70	-.034	-.012	.405	.401
.300	-.066	-.087	-.058	-.052	.410	.414	.409	.407		.75	.004		.397	
.400	-.055	-.074	-.053	-.052	.408	.411	.407	.407		.80	.008	-.018	.397	.402
.500	-.064	-.074	-.055	-.059	.410	.412	.408	.409		.85	.016		.394	
.600	-.063	-.076	-.054	-.065	.410	.412	.410	.410		.90	.010		.396	
.700	-.062	-.073	-.063	-.076	.410	.412	.411	.412						
.800	-.062	-.064	-.063	-.078	.410	.410	.411	.412						
.900	-.048	-.058	-.064	-.066	.407	.408	.409	.410						
.950	-.043	-.050	-.054	-.067	.406	.407	.408	.410						
.980	-.036	-.048	-.050	-.062	.404	.407	.407	.409						

TABLE VII. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.69$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	190	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.024	-.050	.404	.409
0.000	.567				.262				.05	-.020		.403	
.008	.185				.358				.10	-.024	-.026	.404	.404
.015	.130	-.382	-.915	-.757	.369	.470	.503	.536	.15	-.023		.403	
.021	.100				.376				.20	-.022	-.015	.403	.402
.028	.065				.383				.25	-.020	-.003	.403	.399
.034	.036	-.294	-.936	-.779	.389	.454	.566	.540	.30	-.030	.012	.405	.396
.042	.027				.391				.35	-.038	.009	.406	.397
.051	.003				.396				.40	-.044	.024	.408	.394
.068	-.000	-.212	-.343	-.634	.397	.439	.462	.515	.45	-.041	.025	.408	.394
.085	-.014				.399				.50	-.050	.027	.409	.394
.102	-.026				.402				.55	I		I	
.136	-.038	-.177	-.170	-.122	.405	.432	.430	.421	.60	-.046	.017	.409	.396
.159	-.055	-.198	-.144	-.076	.407	.436	.425	.412	.65	-.026		.404	
.258	-.058	-.150	-.102	-.065	.409	.426	.417	.410	.70	.007	.021	.397	.395
.300	-.041	-.122	-.065	-.045	.435	.421	.410	.405	.75	.043		.390	
.400	-.037	-.106	-.053	-.046	.404	.418	.408	.405	.80	.056	.017	.387	.395
.500	-.047	-.103	-.053	-.051	.407	.417	.407	.407	.85	.053		.388	
.600	-.049	-.105	-.058	-.055	.407	.418	.408	.408	.90	.044		.390	
.700	-.056	-.106	-.067	-.065	.408	.418	.411	.410					
.800	-.055	-.098	-.064	-.068	.408	.417	.410	.411					
.900	-.046	-.093	-.062	-.062	.406	.416	.409	.409					
.950	-.043	-.083	-.058	-.060	.405	.413	.409	.409					
.980	-.036	-.079	-.055	-.061	.404	.412	.408	.409					

(f) $M_\infty = 0.60$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.097	-.088	.631	.628
0.000	-1.366				1.024				.05	-.038		.612	
.008	-.833				.857				.10	-.054	-.063	.618	.620
.015	-.427	-.389	-.405	-.407	.734	.722	.727	.727	.15	-.095		.631	
.021	-.321				.701				.20	-.079	-.072	.626	.623
.028	-.282				.690				.25	-.078	-.071	.625	.622
.034	-.266	-.271	-.253	-.239	.685	.686	.683	.675	.30	-.103	-.055	.633	.618
.042	-.233				.674				.35	-.122	-.070	.639	.623
.051	-.234				.674				.40	-.126	-.063	.640	.620
.068	-.189	-.189	-.177	-.178	.660	.661	.657	.655	.45	-.123	-.046	.639	.615
.085	-.169				.654				.50	-.132	-.034	.642	.611
.102	-.159				.651				.55	I		I	
.136	-.145	-.140	-.126	-.121	.646	.646	.641	.637	.60	-.110	-.024	.635	.608
.169	-.137	-.140	-.109	-.093	.643	.645	.636	.629	.65	-.078		.625	
.258	-.106	-.105	-.085	-.077	.634	.634	.628	.624	.70	-.046	-.009	.615	.603
.300	-.086	-.077	-.058	-.051	.628	.625	.619	.615	.75	.007		.598	
.400	-.067	-.067	-.057	-.055	.622	.622	.618	.617	.80	.025	-.019	.592	.606
.500	-.071	-.068	-.065	-.070	.624	.622	.621	.622	.85	.025		.592	
.600	-.070	-.068	-.072	-.085	.623	.622	.623	.626	.90	.015		.595	
.700	-.057	-.072	-.082	-.094	.622	.622	.626	.629					
.800	-.060	-.063	-.083	-.095	.620	.619	.626	.629					
.900	-.046	-.058	-.075	-.090	.615	.617	.624	.627					
.950	-.039	-.046	-.064	-.084	.613	.614	.621	.625					
.980	-.030	-.039	-.057	-.077	.610	.611	.619	.623					

TABLE VII. - Continued

(g) $M_\infty = 0.70$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.106	-.101	.737	.735
0.000	-1.284				1.210				.05	-.054		.717	
.038	-.993				1.082				.10	-.070	-.072	.723	.724
.015	-.627	-.522	-.531	-.583	.936	.898	.899	.922	.15	-.100		.734	
.021	-.418				.856				.20	-.087	-.090	.729	.731
.028	-.321				.819				.25	-.091	-.084	.731	.728
.034	-.285	-.286	-.277	-.272	.805	.807	.802	.802	.30	-.115	-.065	.740	.721
.042	-.248				.791				.35	-.137	-.090	.748	.730
.051	-.245				.790				.40	-.142	-.073	.750	.724
.068	-.204	-.199	-.187	-.188	.774	.775	.768	.770	.45	-.133	-.055	.747	.717
.085	-.184				.767				.50	-.145	-.042	.752	.712
.102	-.171				.762				.55	I		I	
.136	-.152	-.146	-.135	-.126	.756	.755	.748	.747	.60	-.123	-.034	.743	.709
.169	-.142	-.149	-.115	-.089	.753	.756	.741	.733	.65	-.089		.730	
.258	-.112	-.109	-.089	-.077	.742	.741	.731	.729	.70	-.056	-.015	.717	.702
.300	-.084	-.081	-.062	-.053	.731	.730	.721	.720	.75	-.004		.698	
.400	-.069	-.067	-.057	-.050	.725	.725	.719	.722	.80	.019	-.028	.689	.706
.500	-.075	-.074	-.067	-.076	.727	.727	.723	.728	.85	.018		.689	
.600	-.070	-.073	-.079	-.080	.726	.727	.727	.729	.90	.008		.694	
.700	-.057	-.073	-.087	-.092	.725	.727	.730	.734					
.800	-.063	-.062	-.082	-.096	.723	.723	.730	.735					
.900	-.046	-.056	-.075	-.084	.717	.721	.728	.731					
.950	-.040	-.048	-.065	-.082	.714	.718	.724	.730					
.980	-.030	-.040	-.059	-.077	.711	.715	.722	.729					

(h) $M_\infty = 0.80$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.083	-.079	.834	.833
0.000	-1.620				1.766				.05	-.021		.806	
.038	-1.512				1.660				.10	-.042	-.056	.816	.823
.015	-1.366	-.999	-.317	-.282	1.537	1.291	.942	.925	.15	-.096		.840	
.021	-1.241				1.445				.20	-.072	-.084	.830	.835
.028	-.796				1.177				.25	-.094	-.081	.840	.834
.034	-.450	-.284	-.272	-.226	1.003	.926	.920	.900	.30	-.112	-.071	.847	.829
.042	-.285				.926				.35	-.135	-.087	.858	.837
.051	-.204				.889				.40	-.145	-.075	.862	.831
.068	-.181	-.216	-.186	-.184	.879	.895	.881	.880	.45	-.133	-.047	.858	.819
.085	-.182				.879				.50	-.139	-.027	.861	.810
.102	-.184				.880				.55	I		I	
.136	-.172	-.162	-.135	-.126	.875	.870	.858	.854	.60	-.112	-.009	.849	.802
.169	-.162	-.159	-.118	-.091	.870	.869	.850	.839	.65	-.080		.834	
.258	-.123	-.121	-.092	-.081	.853	.852	.839	.834	.70	-.045	.002	.817	.797
.300	-.089	-.090	-.065	-.061	.838	.838	.827	.825	.75	.016		.790	
.400	-.056	-.073	-.055	-.064	.827	.820	.827	.826	.80	.039	-.010	.780	.802
.500	-.073	-.078	-.074	-.079	.830	.833	.831	.833	.85	.037		.781	
.600	-.065	-.081	-.082	-.086	.826	.834	.834	.836	.90	.030		.784	
.700	-.064	-.083	-.098	-.101	.826	.835	.841	.843					
.800	-.057	-.072	-.094	-.110	.823	.830	.840	.847					
.900	-.041	-.068	-.091	-.098	.816	.828	.838	.842					
.950	-.035	-.054	-.078	-.093	.813	.822	.832	.839					
.980	-.025	-.047	-.068	-.082	.809	.819	.828	.834					

TABLE VII. - Continued

(i) $M_\infty = 0.80$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.091	-.088	.839	.837
0.000	-1.445				1.615				.05	-.033		.813	
.008	-1.342				1.530				.10	-.051	-.055	.821	.822
.015	-1.130	-1.002	-.997	-1.112	1.382	1.301	1.298	1.381	.15	-.082		.835	
.021	-.650				1.108				.20	-.068	-.069	.829	.829
.028	-.281				.929				.25	-.093	-.066	.840	.827
.034	-.224	-.270	-.247	-.188	.902	.924	.913	.885	.30	-.099	-.048	.843	.819
.042	-.216				.899				.35	-.119	-.066	.851	.827
.051	-.215				.899				.40	-.124	-.047	.854	.819
.068	-.209	-.213	-.198	-.198	.895	.898	.891	.890	.45	-.119	-.027	.851	.810
.085	-.193				.888				.50	-.130	-.012	.857	.803
.102	-.180				.883				.55	I		I	
.136	-.163	-.159	-.142	-.134	.875	.873	.866	.864	.60	-.106	-.002	.846	.798
.169	-.149	-.156	-.124	-.096	.869	.871	.857	.846	.65	-.073		.831	
.258	-.120	-.114	-.091	-.078	.855	.853	.842	.838	.70	-.036	.004	.814	.796
.300	-.086	-.085	-.061	-.059	.840	.839	.829	.828	.75	.028		.785	
.400	-.067	-.071	-.060	-.063	.831	.833	.828	.829	.80	.053	-.003	.774	.799
.500	-.079	-.073	-.069	-.072	.837	.833	.832	.833	.85	.047		.777	
.600	-.071	-.076	-.080	-.083	.833	.835	.837	.838	.90	.035		.782	
.700	-.066	-.078	-.088	-.094	.830	.836	.841	.844					
.800	-.061	-.063	-.083	-.104	.828	.831	.838	.848					
.900	-.047	-.059	-.075	-.091	.822	.829	.835	.842					
.950	-.042	-.048	-.069	-.084	.820	.825	.832	.839					
.980	-.032	-.042	-.061	-.074	.815	.820	.828	.834					

(j) $M_\infty = 0.80$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.092	-.088	.837	.837
0.000	-1.209				1.428				.05	-.036		.812	
.008	-.959				1.270				.10	-.050	-.055	.818	.822
.015	-.296	-1.023	-1.213	-1.333	.933	1.314	1.430	1.525	.15	-.082		.833	
.021	-.232				.904				.20	-.064	-.058	.825	.823
.028	-.239				.907				.25	-.068	-.051	.826	.821
.034	-.248	-.280	-.288	-.361	.911	.928	.929	.966	.30	-.089	-.029	.836	.811
.042	-.225				.901				.35	-.103	-.038	.842	.815
.051	-.210				.894				.40	-.106	-.026	.844	.810
.068	-.190	-.217	-.200	-.184	.885	.899	.889	.885	.45	-.103	-.007	.842	.801
.085	-.170				.876				.50	-.112	.000	.846	.797
.102	-.159				.871				.55	I		I	
.136	-.152	-.161	-.150	-.143	.868	.874	.866	.867	.60	-.089	-.001	.838	.798
.169	-.144	-.162	-.129	-.104	.864	.875	.857	.849	.65	-.062		.826	
.258	-.117	-.119	-.098	-.077	.852	.855	.843	.837	.70	-.029	.014	.810	.791
.300	-.086	-.081	-.065	-.054	.838	.838	.828	.827	.75	.031		.784	
.400	-.063	-.067	-.059	-.054	.830	.832	.825	.827	.80	.054	.006	.773	.795
.500	-.073	-.074	-.064	-.063	.833	.835	.827	.831	.85	.054		.773	
.600	-.071	-.076	-.071	-.076	.833	.835	.831	.835	.90	.040		.780	
.700	-.068	-.081	-.080	-.086	.831	.838	.835	.840					
.800	-.063	-.066	-.080	-.094	.830	.832	.835	.844					
.900	-.054	-.050	-.074	-.082	.826	.829	.832	.838					
.950	-.046	-.050	-.054	-.073	.822	.825	.828	.834					
.980	-.034	-.043	-.053	-.067	.817	.822	.825	.831					

TABLE VII. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =					ML AT PHI =				X/C	CP		ML	
	180	90	45	330		180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I				I				0.00	-.094	-.083	.842	.835
0.000	-.760					1.159				.05	-.044		.819	
.008	-.231					.902				.10	-.048		.821	.823
.015	-.159	-.961	-1.358	-.854		.873	1.271	1.532	1.210	.15	-.079		.835	
.021	-.174					.875				.20	-.061	-.053	.827	.820
.028	-.175					.876				.25	-.063	-.043	.828	.816
.034	-.181	-.322	-.541	-.817		.879	.945	1.047	1.190	.30	-.078	-.023	.834	.807
.042	-.160					.870				.35	-.089	-.028	.840	.809
.051	-.154					.867				.40	-.093	-.011	.842	.801
.068	-.147	-.253	-.199	-.579		.864	.913	.887	1.068	.45	-.092	.003	.841	.796
.085	-.134					.857				.50	-.096	.011	.843	.793
.102	-.129					.855				.55	I		I	
.136	-.131	-.181	-.160	-.132		.857	.880	.869	.859	.60	-.085	.003	.838	.797
.169	-.129	-.186	-.127	-.077		.855	.883	.855	.834	.65	-.057		.826	
.258	-.112	-.129	-.091	-.065		.848	.856	.839	.828	.70	-.024	.013	.810	.793
.300	-.079	-.093	-.059	-.048		.834	.840	.824	.820	.75	.034		.784	
.400	-.061	-.077	-.057	-.054		.826	.833	.823	.824	.80	.058	.008	.774	.796
.500	-.068	-.081	-.061	-.060		.829	.835	.825	.826	.85	.055		.775	
.600	-.069	-.081	-.055	-.064		.829	.835	.826	.828	.90	.041		.780	
.700	-.070	-.082	-.072	-.073		.830	.836	.830	.832					
.800	-.068	-.075	-.074	-.085		.829	.833	.831	.836					
.900	-.057	-.069	-.069	-.072		.824	.830	.828	.830					
.950	-.051	-.058	-.063	-.067		.821	.825	.825	.829					
.980	-.040	-.052	-.055	-.064		.816	.822	.823	.828					

(l) $M_\infty = 0.80$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.68$

X/L	CP AT PHI =					ML AT PHI =			
	180	90	45	330		180	90	45	330
-.100	I	I				I			
0.000	.448					.592			
.008	.149					.730			
.015	.108	-.531	-.846	-.735		.748	1.042	1.203	1.146
.021	.076					.764			
.028	.040					.780			
.034	.001	-.414	-.856	-.752		.798	.987	1.209	1.155
.042	-.004					.800			
.051	-.014					.805			
.068	-.033	-.330	-.696	-.742		.813	.948	1.124	1.149
.085	-.044					.818			
.102	-.059					.825			
.136	-.072	-.262	-.313	-.411		.831	.917	.943	.985
.169	-.083	-.277	-.228	-.229		.835	.924	.901	.901
.258	-.095	-.187	-.115	-.062		.837	.882	.850	.825
.300	-.061	-.141	-.066	-.035		.825	.863	.828	.813
.400	-.047	-.121	-.052	-.036		.818	.852	.822	.814
.500	-.059	-.124	-.061	-.050		.824	.854	.825	.821
.600	-.062	-.123	-.057	-.060		.825	.853	.828	.826
.700	-.064	-.125	-.078	-.070		.827	.854	.833	.830
.800	-.064	-.116	-.075	-.076		.827	.849	.832	.832
.900	-.050	-.108	-.073	-.069		.821	.846	.831	.828
.950	-.050	-.097	-.069	-.066		.822	.841	.829	.827
.980	-.039	-.090	-.065	-.064		.815	.838	.827	.826

TABLE VII. - Continued

(m) $M_\infty = 0.85$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	P		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.097	-.093	.895	.891
0.000	-1.292				1.648				.05	-.036		.865	
.008	-1.196				1.562				.10	-.055	-.061	.875	.876
.015	-1.021	-.978	-.956	-.992	1.424	1.392	1.377	1.399	.15	-.094		.894	
.021	-.942				1.368				.20	-.069	-.073	.882	.881
.028	-.859				1.312				.25	-.079	-.068	.887	.879
.034	-.766	-.624	-.664	-.706	1.255	1.167	1.193	1.215	.30	-.105	-.056	.900	.874
.042	-.401				1.049				.35	-.126	-.064	.910	.877
.051	-.174				.934				.40	-.131	-.046	.912	.869
.068	-.131	-.169	-.157	-.143	.912	.928	.925	.916	.45	-.124	-.023	.908	.857
.085	-.151				.921				.50	-.133	-.007	.912	.849
.102	-.163				.927				.55	I		I	
.136	-.168	-.159	-.142	-.140	.931	.924	.917	.914	.60	-.108	-.001	.901	.846
.159	-.158	-.165	-.128	-.103	.925	.926	.910	.896	.65	-.076		.884	
.258	-.124	-.121	-.096	-.082	.908	.905	.896	.886	.70	-.040	.006	.867	.843
.300	-.088	-.085	-.064	-.059	.890	.887	.880	.875	.75	.024		.836	
.400	-.065	-.069	-.059	-.059	.879	.879	.877	.875	.80	.050	.001	.822	.846
.500	-.031	-.074	-.073	-.074	.886	.882	.883	.882	.85	.050		.822	
.600	-.075	-.075	-.080	-.083	.882	.882	.886	.887	.90	.040		.827	
.700	-.069	-.082	-.091	-.098	.879	.886	.891	.893					
.800	-.064	-.071	-.092	-.108	.877	.881	.893	.898					
.900	-.052	-.067	-.083	-.094	.871	.878	.888	.891					
.950	-.043	-.052	-.071	-.089	.857	.871	.882	.888					
.980	-.032	-.045	-.063	-.079	.861	.866	.878	.883					

(n) $M_\infty = 0.90$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-1.283				1.845			
.008	-1.142				1.679			
.015	-1.034	-.838	-.682	-.711	1.573	1.407	1.295	1.311
.021	-.970				1.513			
.028	-.927				1.479			
.034	-.902	-.711	-.595	-.567	1.457	1.313	1.238	1.216
.042	-.854				1.420			
.051	-.802				1.380			
.068	-.738	-.469	-.288	-.252	1.334	1.158	1.055	1.032
.085	-.655				1.277			
.102	-.379				1.106			
.136	-.055	-.147	-.145	-.138	.928	.977	.975	.971
.169	-.065	-.145	-.125	-.091	.933	.975	.966	.946
.258	-.112	-.130	-.101	-.086	.958	.966	.952	.943
.300	-.081	-.085	-.058	-.062	.941	.943	.935	.930
.400	-.062	-.074	-.060	-.064	.932	.936	.931	.929
.500	-.077	-.087	-.081	-.088	.939	.943	.942	.942
.600	-.076	-.089	-.095	-.096	.938	.944	.949	.946
.700	-.072	-.098	-.107	-.117	.937	.949	.956	.957
.800	-.062	-.083	-.107	-.126	.931	.941	.955	.961
.900	-.048	-.074	-.096	-.108	.923	.937	.950	.952
.950	-.039	-.058	-.086	-.101	.918	.928	.944	.948
.980	-.028	-.051	-.074	-.090	.912	.924	.938	.942

TABLE VII. - Continued

(o) $M_\infty = 0.90$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-1.144				1.673			
.008	-1.057				1.587			
.015	-.911	-.842	-.834	-.870	1.459	1.406	1.399	1.432
.021	-.821				1.390			
.028	-.778				1.358			
.034	-.753	-.718	-.743	-.743	1.341	1.320	1.333	1.340
.042	-.706				1.307			
.051	-.648				1.268			
.068	-.559	-.547	-.531	-.571	1.218	1.207	1.194	1.224
.085	-.397				1.114			
.102	-.174				.990			
.136	-.093	-.110	-.098	-.075	.946	.957	.949	.940
.169	-.118	-.131	-.103	-.064	.959	.968	.951	.934
.258	-.126	-.120	-.095	-.077	.963	.962	.947	.941
.300	-.087	-.080	-.059	-.055	.943	.941	.928	.928
.400	-.065	-.066	-.060	-.057	.932	.934	.928	.929
.500	-.082	-.080	-.075	-.080	.942	.941	.937	.941
.600	-.081	-.082	-.087	-.095	.942	.944	.943	.949
.700	-.078	-.088	-.101	-.108	.940	.947	.950	.955
.800	-.071	-.075	-.099	-.116	.936	.940	.949	.960
.900	-.055	-.069	-.089	-.100	.928	.937	.944	.951
.950	-.047	-.055	-.077	-.093	.924	.929	.938	.948
.980	-.033	-.046	-.068	-.082	.916	.924	.933	.942

(p) $M_\infty = 0.90$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-1.013				1.553			
.008	-.862				1.426			
.015	-.707	-.839	-.946	-.998	1.313	1.409	1.494	1.534
.021	-.608				1.246			
.028	-.569				1.221			
.034	-.549	-.716	-.845	-.875	1.209	1.319	1.413	1.432
.042	-.498				1.177			
.051	-.415				1.128			
.068	-.243	-.502	-.667	-.713	1.029	1.179	1.286	1.314
.085	-.156				.982			
.102	-.152				.980			
.136	-.173	-.139	-.077	-.038	.991	.972	.940	.918
.169	-.160	-.150	-.077	-.034	.984	.977	.940	.915
.258	-.131	-.122	-.084	-.065	.969	.962	.944	.931
.300	-.087	-.081	-.055	-.046	.945	.940	.928	.921
.400	-.063	-.068	-.055	-.053	.933	.933	.928	.925
.500	-.080	-.079	-.069	-.072	.941	.939	.935	.935
.600	-.079	-.082	-.080	-.085	.941	.941	.942	.942
.700	-.080	-.088	-.093	-.101	.941	.944	.949	.950
.800	-.074	-.080	-.091	-.100	.936	.940	.947	.950
.900	-.059	-.073	-.082	-.089	.929	.935	.942	.944
.950	-.054	-.057	-.071	-.083	.926	.927	.937	.941
.980	-.039	-.047	-.062	-.073	.918	.922	.932	.936

TABLE VII. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-.730				1.361			
.008	-.471				1.158			
.015	-.310	-.829	-1.041	-1.104	1.065	1.399	1.573	1.638
.021	-.201				1.004			
.028	-.214				1.011			
.034	-.219	-.697	-.938	-.987	1.014	1.304	1.482	1.527
.042	-.204				1.007			
.051	-.226				1.019			
.068	-.243	-.408	-.766	-.820	1.028	1.122	1.351	1.392
.085	-.207				1.009			
.102	-.194				1.002			
.136	-.190	-.196	-.112	-.070	.999	1.003	.956	.935
.169	-.158	-.175	-.073	-.018	.982	.991	.936	.908
.238	-.129	-.131	-.076	-.051	.966	.968	.937	.925
.300	-.087	-.089	-.049	-.035	.944	.945	.924	.917
.400	-.059	-.076	-.051	-.048	.929	.938	.925	.923
.500	-.078	-.087	-.066	-.061	.939	.944	.933	.930
.600	-.077	-.092	-.078	-.075	.939	.947	.939	.937
.700	-.080	-.096	-.087	-.086	.941	.949	.944	.943
.800	-.074	-.085	-.082	-.091	.938	.943	.941	.947
.900	-.065	-.080	-.074	-.077	.933	.940	.937	.939
.950	-.055	-.067	-.067	-.073	.927	.933	.934	.937
.980	-.042	-.056	-.060	-.067	.921	.928	.930	.933

(r) $M_\infty = 0.90$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	.411				.684			
.008	.141				.823			
.015	.116	-.798	-.808	-.678	.836	1.369	1.377	1.282
.021	.066				.862			
.028	.027				.881			
.034	-.008	-.455	-.806	-.701	.899	1.144	1.375	1.297
.042	-.017				.904			
.051	-.036				.914			
.068	-.056	-.321	-.710	-.719	.925	1.067	1.307	1.311
.085	-.067				.930			
.102	-.089				.942			
.136	-.125	-.363	-.482	-.575	.961	1.091	1.161	1.217
.169	-.132	-.403	-.366	-.441	.964	1.114	1.094	1.135
.258	-.128	-.226	-.164	-.138	.962	1.015	.982	.966
.300	-.083	-.161	-.080	-.061	.939	.980	.937	.926
.400	-.049	-.125	-.042	-.021	.921	.960	.917	.905
.500	-.062	-.123	-.053	-.043	.927	.958	.923	.916
.600	-.052	-.122	-.066	-.060	.928	.957	.930	.925
.700	-.069	-.129	-.082	-.074	.931	.962	.938	.934
.800	-.069	-.115	-.083	-.081	.931	.954	.939	.937
.900	-.060	-.109	-.073	-.075	.926	.951	.933	.934
.950	-.055	-.095	-.067	-.073	.924	.943	.930	.933
.980	-.045	-.085	-.064	-.071	.918	.938	.929	.932

TABLE VII. - Continued

(s) $M_\infty = 0.92$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-1.086				1.680			
.008	-.994				1.585			
.015	-.867	-.804	-.797	-.843	1.472	1.416	1.414	1.447
.021	-.782				1.403			
.028	-.746				1.373			
.034	-.718	-.688	-.707	-.712	1.352	1.329	1.346	1.347
.042	-.668				1.315			
.051	-.623				1.284			
.068	-.560	-.548	-.537	-.553	1.241	1.233	1.230	1.237
.085	-.507				1.207			
.102	-.410				1.147			
.136	-.174	-.129	-.107	-.072	1.010	.985	.975	.954
.169	-.081	-.090	-.068	-.042	.959	.964	.952	.936
.258	-.114	-.110	-.080	-.068	.977	.974	.959	.950
.300	-.080	-.073	-.053	-.051	.958	.954	.944	.941
.400	-.063	-.064	-.056	-.055	.949	.950	.946	.943
.500	-.085	-.076	-.077	-.078	.961	.957	.956	.956
.600	-.081	-.086	-.088	-.094	.959	.962	.963	.964
.700	-.078	-.089	-.100	-.107	.957	.964	.969	.971
.800	-.072	-.076	-.099	-.116	.954	.956	.969	.976
.900	-.055	-.073	-.092	-.106	.945	.953	.965	.971
.950	-.049	-.059	-.079	-.098	.941	.946	.958	.967
.980	-.033	-.047	-.069	-.087	.933	.939	.952	.960

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =			
	180	90	45	330	180	90	45	330
-.100	I	I			I	I		
0.000	-1.122				1.800			
.008	-1.078				1.745			
.015	-.948	-.757	-.618	-.642	1.601	1.428	1.322	1.333
.021	-.871				1.527			
.028	-.831				1.491			
.034	-.805	-.643	-.535	-.515	1.472	1.339	1.263	1.249
.042	-.763				1.437			
.051	-.718				1.401			
.068	-.662	-.516	-.396	-.380	1.357	1.248	1.171	1.162
.085	-.609				1.318			
.102	-.554				1.276			
.136	-.474	-.359	-.313	-.308	1.221	1.146	1.119	1.117
.169	-.362	-.321	-.281	-.198	1.149	1.123	1.101	1.049
.258	-.052	-.090	-.104	-.071	.967	.987	.998	.976
.300	-.022	-.054	-.041	-.048	.950	.967	.963	.964
.400	-.036	-.060	-.046	-.052	.958	.969	.967	.966
.500	-.072	-.084	-.073	-.082	.979	.982	.982	.982
.600	-.079	-.095	-.094	-.097	.982	.991	.993	.990
.700	-.079	-.105	-.115	-.123	.982	.998	1.004	1.005
.800	-.068	-.089	-.115	-.134	.975	.989	1.003	1.011
.900	-.050	-.081	-.107	-.116	.965	.982	.998	1.000
.950	-.041	-.066	-.093	-.106	.960	.973	.991	.995
.980	-.029	-.052	-.078	-.092	.952	.966	.982	.987

TABLE VII. - Continued

(u) $M_\infty = 0.94$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.030	-.045	.956	.964
0.000	-1.033				1.693				.05	-.024		.952	
.008	-.931				1.585				.10	-.042	-.038	.962	.960
.015	-.819	-.753	-.751	-.787	1.481	1.424	1.425	1.453	.15	-.069		.977	
.021	-.737				1.412				.20	-.071	-.049	.978	.966
.028	-.690				1.376				.25	-.074	-.045	.981	.964
.034	-.669	-.644	-.661	-.665	1.360	1.340	1.354	1.355	.30	-.080	-.042	.983	.962
.042	-.622				1.324				.35	-.101	-.051	.995	.967
.051	-.576				1.291				.40	-.104	-.040	.997	.961
.068	-.523	-.521	-.508	-.523	1.255	1.253	1.244	1.254	.45	-.114	-.033	1.003	.957
.085	-.485				1.229				.50	-.123	-.023	1.008	.951
.102	-.429				1.192				.55	I		I	
.136	-.379	-.366	-.376	-.388	1.161	1.152	1.158	1.166	.60	-.096	-.008	.993	.943
.159	-.317	-.343	-.294	-.242	1.122	1.138	1.108	1.076	.65	-.099		.994	
.258	-.058	-.072	-.051	-.041	.977	.979	.968	.961	.70	-.081	.003	.984	.937
.330	-.039	-.038	-.019	-.019	.960	.960	.949	.949	.75	-.037		.959	
.400	-.043	-.047	-.037	-.041	.962	.965	.959	.961	.80	-.007	.002	.942	.937
.500	-.078	-.074	-.072	-.074	.982	.980	.979	.979	.85	.018		.929	
.630	-.082	-.086	-.088	-.093	.984	.986	.988	.990	.90	.014		.931	
.700	-.084	-.095	-.108	-.112	.985	.991	.999	1.000					
.800	-.077	-.082	-.104	-.123	.982	.985	.997	1.006					
.900	-.056	-.077	-.096	-.110	.970	.981	.992	.998					
.950	-.051	-.063	-.082	-.101	.967	.974	.985	.993					
.980	-.034	-.047	-.070	-.086	.957	.964	.978	.985					

(v) $M_\infty = 0.94$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.029	-.030	.957	.957
0.000	-.929				1.586				.05	-.015		.950	
.008	-.742				1.421				.10	-.019	-.027	.951	.955
.015	-.640	-.751	-.849	-.894	1.340	1.427	1.512	1.553	.15	-.050		.968	
.021	-.542				1.271				.20	-.044	-.026	.966	.955
.028	-.507				1.247				.25	-.043	-.024	.965	.954
.034	-.492	-.640	-.761	-.788	1.237	1.340	1.436	1.458	.30	-.056	-.018	.972	.951
.042	-.448				1.207				.35	-.072	-.010	.981	.946
.051	-.402				1.178				.40	-.077	.001	.983	.940
.068	-.357	-.503	-.609	-.645	1.149	1.243	1.318	1.345	.45	-.087	.016	.987	.932
.085	-.328				1.129				.50	-.093	.023	.991	.928
.102	-.293				1.110				.55	I		I	
.136	-.296	-.359	-.435	-.464	1.109	1.150	1.199	1.218	.60	-.084	.020	.986	.929
.169	-.279	-.359	-.325	-.295	1.099	1.150	1.130	1.111	.65	-.085		.986	
.258	-.166	-.091	-.037	-.013	1.033	.991	.962	.946	.70	-.065	.012	.975	.933
.330	-.050	-.035	-.005	.003	.967	.960	.943	.938	.75	-.037		.961	
.400	-.044	-.045	-.029	.025	.965	.966	.957	.954	.80	.002	.017	.939	.931
.500	-.077	-.074	-.063	-.064	.983	.982	.976	.975	.85	.027		.925	
.630	-.092	-.088	-.081	-.086	.987	.990	.984	.987	.90	.035		.921	
.700	-.086	-.097	-.103	-.104	.988	.995	.996	.997					
.800	-.080	-.085	-.101	-.113	.985	.988	.995	1.001					
.900	-.068	-.078	-.092	-.096	.978	.984	.990	.992					
.950	-.055	-.054	-.078	-.089	.971	.975	.983	.988					
.980	-.039	-.051	-.057	-.079	.962	.968	.977	.982					

TABLE VII. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.130									0.00	-.015	-.010	.946	.943
0.000	-.726				1.402				.05	-.007		.942	
.008	-.472				1.220				.10	-.009	.002	.943	.937
.015	-.298	-.744	-.932	-.995	1.110	1.418	1.583	1.647	.15	-.024		.952	
.021	-.219				1.063				.20	-.019	-.009	.950	.943
.028	-.219				1.063				.25	-.048	-.000	.965	.938
.034	-.217	-.624	-.851	-.895	1.062	1.325	1.507	1.545	.30	-.051	.005	.967	.936
.042	-.191				1.046				.35	-.064	.000	.974	.937
.051	-.170				1.034				.40	-.057	.016	.970	.929
.068	-.231	-.387	-.702	-.750	1.070	1.165	1.384	1.421	.45	-.065	.032	.975	.921
.085	-.243				1.077				.50	-.060	.044	.972	.915
.102	-.231				1.070				.55	I		I	
.136	-.253	-.362	-.453	-.529	1.093	1.149	1.208	1.259	.60	-.049	.033	.966	.921
.169	-.248	-.400	-.386	-.311	1.080	1.173	1.165	1.118	.65	-.039		.960	
.258	-.265	-.167	-.037	-.008	1.090	1.032	.959	.943	.70	-.019	.034	.949	.920
.300	-.102	-.039	-.000	.015	.996	.960	.939	.930	.75	.010		.933	
.400	-.036	-.048	-.021	-.015	.959	.965	.950	.947	.80	.024	.037	.925	.918
.500	-.072	-.078	-.057	-.053	.978	.982	.970	.968	.85	.040		.917	
.600	-.080	-.093	-.079	-.074	.983	.985	.982	.979	.90	.044		.914	
.700	-.085	-.103	-.093	-.093	.985	.994	.991	.989					
.800	-.082	-.091	-.094	-.100	.984	.990	.991	.993					
.900	-.073	-.084	-.082	-.086	.979	.986	.985	.985					
.950	-.060	-.071	-.070	-.078	.972	.978	.977	.981					
.980	-.043	-.057	-.060	-.069	.962	.970	.972	.975					

(x) $M_\infty = 0.94$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I				0.00	.001	-.011	.936	.943
0.000	.414				.713				.05	.002		.935	
.008	.170				.845				.10	-.002	-.012	.938	.944
.015	.139	-.703	-1.099	-1.202	.861	1.381	1.759	1.902	.15	-.011		.943	
.021	.088				.889				.20	-.003	-.005	.939	.940
.028	.049				.910				.25	-.010	.003	.942	.935
.034	.015	-.405	-1.002	-1.074	.929	1.174	1.649	1.731	.30	-.005	-.003	.940	.938
.042	-.030				.937				.35	-.013	.008	.944	.932
.051	-.021				.948				.40	-.011	.013	.943	.930
.068	-.048	-.430	-.843	-.920	.964	1.190	1.493	1.568	.45	-.029	.030	.953	.920
.085	-.063				.972				.50	-.026	.032	.951	.919
.102	-.085				.984				.55	I		I	
.136	-.152	-.413	-.572	-.614	1.022	1.179	1.286	1.315	.60	-.019	.036	.948	.917
.169	-.162	-.482	-.528	-.443	1.028	1.224	1.255	1.198	.65	-.029		.953	
.258	-.252	-.471	-.102	-.041	1.081	1.217	.994	.959	.70	-.031	.039	.954	.916
.300	-.233	-.232	-.015	.018	1.069	1.069	.945	.927	.75	-.002		.938	
.400	-.020	-.068	-.035	.011	.948	.975	.940	.931	.80	.016	.037	.928	.917
.500	-.045	-.104	-.047	-.037	.962	.994	.963	.958	.85	.038		.916	
.600	-.057	-.120	-.072	-.064	.969	1.004	.977	.972	.90	.029		.921	
.700	-.071	-.132	-.090	-.078	.976	1.011	.986	.981					
.800	-.074	-.123	-.091	-.088	.978	1.006	.987	.986					
.900	-.071	-.117	-.084	-.080	.977	1.002	.983	.982					
.950	-.064	-.100	-.072	-.077	.972	.992	.977	.980					
.980	-.049	-.085	-.065	-.073	.964	.985	.973	.978					

TABLE VII. - Continued

(y) $M_\infty = 0.96$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	130	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.051	-.317	.988	.967
0.000	-.981				1.696				.05	-.022		.972	
.008	-.879				1.586				.10	-.012	-.028	.966	.974
.015	-.765	-.710	-.710	-.737	1.480	1.429	1.432	1.451	.15	-.027		.975	
.021	-.696				1.421				.20	-.027	-.034	.975	.977
.028	-.651				1.384				.25	-.041	-.031	.982	.975
.034	-.627	-.609	-.609	-.622	1.364	1.348	1.351	1.358	.30	-.045	-.044	.985	.983
.042	-.584				1.331				.35	-.058	-.035	.992	.977
.051	-.545				1.302				.40	-.079	-.032	1.004	.975
.068	-.496	-.502	-.471	-.491	1.268	1.270	1.251	1.261	.45	-.080	-.311	1.004	.964
.085	-.447				1.233				.50	-.096	.002	1.014	.957
.102	-.401				1.203				.55	I		I	
.136	-.356	-.351	-.356	-.376	1.173	1.168	1.174	1.184	.60	-.062	.003	.995	.956
.169	-.320	-.347	-.313	-.317	1.150	1.165	1.146	1.146	.65	-.059		.993	
.258	-.305	-.303	-.250	-.221	1.141	1.138	1.106	1.087	.70	-.056	.007	.992	.953
.300	-.242	-.234	-.144	-.148	1.102	1.095	1.042	1.042	.75	-.005		.961	
.400	-.007	-.033	-.020	-.027	.962	.976	.970	.972	.80	.012	.017	.951	.947
.500	-.051	-.043	-.045	-.051	.986	.982	.985	.987	.85	.026		.943	
.600	-.067	-.067	-.073	-.078	.996	.996	1.000	1.002	.90	.037		.937	
.700	-.082	-.095	-.102	-.111	1.004	1.012	1.018	1.021					
.800	-.081	-.089	-.112	-.127	1.004	1.008	1.023	1.030					
.900	-.064	-.083	-.102	-.113	.994	1.005	1.018	1.023					
.950	-.050	-.060	-.080	-.100	.986	.991	1.005	1.015					
.980	-.031	-.047	-.067	-.084	.975	.984	.998	1.005					

(z) $M_\infty = 0.98$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.071	-.054	1.020	1.010
0.000	-1.026				1.816				.05	-.074		1.022	
.008	-.971				1.743				.10	-.080	-.065	1.025	1.016
.015	-.857	-.663	-.553	-.557	1.613	1.430	1.340	1.344	.15	-.086		1.030	
.021	-.787				1.546				.20	-.087	-.069	1.032	1.019
.028	-.745				1.507				.25	-.099	-.037	1.039	1.000
.034	-.727	-.558	-.463	-.431	1.490	1.345	1.273	1.251	.30	-.107	-.017	1.043	.988
.042	-.682				1.449				.35	-.115	-.032	1.048	.996
.051	-.640				1.413				.40	-.135	-.029	1.060	.994
.068	-.596	-.449	-.331	-.332	1.370	1.263	1.193	1.182	.45	-.139	-.016	1.063	.985
.085	-.537				1.332				.50	-.144	-.005	1.065	.979
.102	-.484				1.292				.55	I		I	
.136	-.417	-.317	-.269	-.277	1.243	1.172	1.144	1.145	.60	-.080	.009	1.025	.970
.169	-.354	-.309	-.259	-.246	1.198	1.167	1.138	1.125	.65	-.074		1.022	
.258	-.274	-.290	-.240	-.223	1.146	1.155	1.126	1.110	.70	-.066	.005	1.017	.974
.300	-.233	-.248	-.193	-.183	1.119	1.128	1.096	1.087	.75	-.023		.991	
.400	-.120	-.155	-.161	-.163	1.049	1.070	1.076	1.075	.80	-.006	.007	.982	.973
.500	-.119	-.140	-.143	-.150	1.049	1.062	1.065	1.067	.85	.009		.972	
.600	-.122	-.134	-.140	-.152	1.050	1.058	1.064	1.068	.90	.009		.972	
.700	-.132	-.149	-.159	-.167	1.056	1.066	1.075	1.078					
.800	-.133	-.134	-.181	-.198	1.057	1.056	1.088	1.097					
.900	-.111	-.057	-.093	-.179	1.043	1.010	1.033	1.085					
.950	-.031	-.061	-.062	-.085	.996	1.011	1.014	1.028					
.980	.002	-.022	-.043	-.056	.977	.990	1.003	1.011					

TABLE VII. - Continued

(aa) $M_\infty = 0.98$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.061	-.026	1.012	.991
0.000	-.945				1.705				.05	-.057		1.010	
.008	-.839				1.589				.10	-.070	-.029	1.019	.993
.015	-.735	-.672	-.675	-.701	1.492	1.432	1.436	1.458	.15	-.086		1.029	
.021	-.665				1.430				.20	-.066	-.018	1.015	.986
.028	-.617				1.388				.25	-.084	-.016	1.025	.985
.034	-.593	-.569	-.581	-.592	1.369	1.349	1.360	1.367	.30	-.087	-.007	1.027	.980
.042	-.545				1.331				.35	-.096	-.013	1.033	.983
.051	-.511				1.306				.40	-.107	-.006	1.040	.980
.068	-.464	-.462	-.440	-.460	1.272	1.265	1.257	1.269	.45	-.086	.010	1.026	.969
.085	-.424				1.243				.50	-.086	.018	1.026	.965
.102	-.374				1.208				.55				
.136	-.335	-.322	-.331	-.348	1.181	1.173	1.182	1.191	.60	-.037	.024	.997	.962
.169	-.302	-.319	-.295	-.294	1.160	1.172	1.157	1.155	.65	-.031		.994	
.258	-.290	-.287	-.241	-.214	1.153	1.151	1.122	1.104	.70	-.022	.016	.989	.965
.300	-.259	-.234	-.175	-.165	1.132	1.117	1.080	1.072	.75	.011		.969	
.400	-.152	-.143	-.135	-.137	1.066	1.060	1.057	1.055	.80	.042	.012	.951	.967
.500	-.126	-.132	-.132	-.136	1.050	1.054	1.055	1.054	.85	.039		.953	
.600	-.126	-.129	-.132	-.145	1.050	1.052	1.054	1.061	.90	.048		.948	
.700	-.134	-.108	-.153	-.159	1.055	1.040	1.066	1.070					
.800	-.100	-.116	-.152	-.181	1.035	1.043	1.065	1.083					
.900	-.036	-.062	-.071	-.111	.997	1.011	1.017	1.041					
.950	-.026	-.046	-.055	-.066	.991	1.002	1.008	1.015					
.980	-.013	-.032	-.046	-.059	.983	.992	1.002	1.010					

(bb) $M_\infty = 0.98$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.056	-.040	1.009	1.001
0.000	-.855				1.606				.05	-.056		1.010	
.008	-.655				1.422				.10	-.059	-.045	1.014	1.004
.015	-.564	-.669	-.754	-.811	1.352	1.430	1.507	1.565	.15	-.069		1.020	
.021	-.476				1.285				.20	-.069	-.032	1.020	.996
.028	-.433				1.255				.25	-.082	-.028	1.028	.994
.034	-.419	-.568	-.669	-.711	1.244	1.349	1.434	1.470	.30	-.082	-.018	1.026	.988
.042	-.384				1.218				.35	-.070	-.019	1.017	.988
.051	-.345				1.189				.40	-.085	-.001	1.026	.978
.068	-.314	-.445	-.535	-.577	1.168	1.260	1.330	1.358	.45	-.091	.009	1.029	.972
.085	-.290				1.153				.50	-.081	.007	1.023	.973
.102	-.261				1.134				.55				
.136	-.259	-.316	-.379	-.416	1.133	1.172	1.217	1.239	.60	-.047	.004	1.003	.974
.169	-.253	-.322	-.322	-.341	1.129	1.177	1.179	1.188	.65	-.041		.999	
.258	-.285	-.304	-.235	-.189	1.149	1.164	1.122	1.089	.70	-.027	.012	.992	.969
.300	-.267	-.249	-.158	-.140	1.138	1.129	1.072	1.059	.75	.000		.976	
.400	-.191	-.138	-.115	-.112	1.090	1.060	1.044	1.044	.80	.030	.008	.959	.973
.500	-.139	-.136	-.124	-.122	1.059	1.059	1.049	1.050	.85	.042		.953	
.600	-.127	-.133	-.130	-.137	1.053	1.056	1.053	1.059	.90	.037		.956	
.700	-.135	-.146	-.150	-.155	1.058	1.064	1.064	1.070					
.800	-.131	-.143	-.155	-.178	1.056	1.062	1.067	1.084					
.900	-.100	-.062	-.069	-.084	1.037	1.014	1.016	1.028					
.950	-.041	-.040	-.048	-.060	1.002	.999	1.004	1.013					
.980	-.012	-.022	-.037	-.049	.985	.989	.997	1.006					

TABLE VII. - Concluded

(cc) $M_\infty = 0.98$, $\alpha = 4.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

x/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.049	-.012	1.005	.985
0.000	-.643				1.409				.05	-.039		.999	
.008	-.404				1.220				.10	-.042	-.008	1.001	.982
.015	-.253	-.664	-.850	-.899	1.130	1.430	1.600	1.656	.15	-.062		1.013	
.021	-.134				1.086				.20	-.065	.001	1.013	.976
.028	-.177				1.031				.25	-.072	.017	1.018	.967
.034	-.177	-.553	-.773	-.802	1.081	1.340	1.529	1.554	.30	-.086	.022	1.026	.965
.042	-.155				1.068				.35	-.092	.026	1.031	.952
.051	-.136				1.056				.40	-.107	.036	1.039	.957
.068	-.136	-.361	-.630	-.676	1.075	1.203	1.399	1.440	.45	-.106	.043	1.038	.953
.085	-.137				1.097				.50	-.079	.054	1.022	.947
.102	-.176				1.081				.55				
.136	-.211	-.314	-.416	-.479	1.103	1.171	1.238	1.285	.60	-.033	.059	.995	.944
.169	-.216	-.352	-.371	-.362	1.106	1.196	1.206	1.203	.65	-.035		.996	
.258	-.270	-.346	-.260	-.172	1.140	1.192	1.133	1.081	.70	-.024	.053	.991	.947
.300	-.258	-.313	-.167	-.124	1.134	1.169	1.075	1.052	.75	.002		.973	
.400	-.209	-.158	-.117	-.099	1.104	1.071	1.045	1.036	.80	.036	.051	.956	.948
.500	-.152	-.155	-.127	-.113	1.064	1.065	1.051	1.045	.85	.071		.937	
.600	-.130	-.149	-.132	-.132	1.055	1.065	1.054	1.056	.90	.073		.935	
.700	-.136	-.161	-.153	-.145	1.059	1.074	1.067	1.065					
.800	-.145	-.160	-.163	-.168	1.064	1.074	1.073	1.078					
.900	-.076	-.160	-.115	-.109	1.023	1.073	1.044	1.042					
.950	-.041	-.054	-.067	-.062	1.001	1.010	1.015	1.014					
.980	-.037	-.025	-.057	-.040	.992	.993	1.011	1.001					

(dd) $M_\infty = 0.98$, $\alpha = 8.4^\circ$, and $\dot{m}/\dot{m}_\infty = 0.67$

x/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	130	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100									0.00	-.353	-.025	1.009	.992
0.000	.425				.738				.05	-.047		1.006	
.008	.218				.854				.10	-.041	-.046	1.002	1.004
.015	.132	-.619	-.991	-1.091	.874	1.393	1.768	1.912	.15	-.060		1.013	
.021	.135				.900				.20	-.059	-.015	1.013	.987
.028	.098				.922				.25	-.064	-.003	1.016	.983
.034	.054	-.351	-.901	-.972	.941	1.196	1.661	1.743	.30	-.074	-.007	1.021	.982
.042	.051				.949				.35	-.078	-.004	1.024	.980
.051	.029				.961				.40	-.095	.015	1.036	.968
.068	.000	-.364	-.757	-.837	.979	1.204	1.512	1.590	.45	-.096	.020	1.037	.960
.085	-.018				.990				.50	-.088	.039	1.032	.954
.102	-.039				1.002				.55				
.136	-.106	-.353	-.510	-.555	1.041	1.197	1.309	1.341	.60	-.034	.033	.998	.957
.169	-.122	-.410	-.478	-.485	1.051	1.235	1.285	1.287	.65	-.022		.991	
.258	-.210	-.428	-.353	-.192	1.105	1.249	1.198	1.091	.70	-.015	.044	.986	.950
.300	-.207	-.422	-.169	-.129	1.103	1.244	1.091	1.053	.75	.018		.968	
.400	-.139	-.233	-.116	-.090	1.091	1.119	1.047	1.029	.80	.050	.044	.949	.951
.500	-.217	-.198	-.124	-.106	1.110	1.097	1.053	1.038	.85	.061		.942	
.600	-.146	-.195	-.140	-.131	1.064	1.095	1.064	1.054	.90	.071		.937	
.700	-.136	-.200	-.159	-.146	1.058	1.097	1.075	1.062					
.800	-.145	-.192	-.169	-.114	1.064	1.092	1.079	1.044					
.900	-.152	-.138	-.124	-.079	1.058	1.058	1.052	1.023					
.950	-.119	-.068	-.091	-.060	1.043	1.016	1.032	1.012					
.980	-.040	-.061	-.057	-.045	1.002	1.012	1.017	1.002					

TABLE VIII. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 4

(a) $M_\infty = 0.40$, $\alpha = -2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-0.100	I	I			I	I			0.00	-.032	-.048	.390	.406
0.000	-.448				.482				.05	.064		.383	
.008	-.477				.487				.10	.025	-.074	.389	.411
.015	-.477	-.600	-.631	-.642	.487	.509	.514	.516	.15	-.025		.401	
.021	-.479				.487				.20	-.044	-.101	.405	.417
.028	-.488				.489				.25	-.050	-.114	.407	.419
.034	-.490	-.610	-.624	-.634	.489	.510	.513	.515	.30	-.113	-.097	.419	.416
.042	-.493				.489				.35	-.131	-.139	.423	.424
.051	-.504				.492				.40	-.131	-.102	.422	.416
.068	-.514	-.607	-.642	-.645	.493	.509	.516	.516	.45	-.132	-.084	.423	.413
.085	-.527				.496				.50	-.155	-.050	.427	.406
.102	-.534				.497				.55	I		I	
.136	-.559	-.644	-.672	-.684	.502	.517	.521	.523	.60	-.131	-.018	.423	.400
.169	-.581	-.658	-.722	-.705	.506	.519	.530	.527	.65	-.140		.424	
.258	-.552	-.575	-.469	-.486	.500	.504	.486	.488	.70	-.092	-.016	.415	.399
.300	-.478	-.422	-.245	-.237	.487	.478	.444	.443	.75	-.019		.400	
.400	-.229	-.086	.011	.039	.441	.414	.394	.388	.80	-.002	-.031	.397	.402
.500	-.068	.007	.019	.022	.410	.395	.392	.392	.85	.020		.392	
.600	-.018	-.007	-.021	-.025	.400	.398	.401	.401	.90	.021		.392	
.700	-.022	-.036	-.052	-.064	.401	.403	.407	.409					
.800	-.035	-.054	-.077	-.091	.403	.407	.412	.414					
.900	-.053	-.074	-.086	-.100	.407	.411	.414	.417					
.950	-.069	-.086	-.095	-.110	.411	.414	.415	.418					
.980	-.091	-.109	-.121	-.115	.415	.418	.416	.419					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-0.100	I	I			I	I			0.00	-.192	-.015	.435	.400
0.000	-.508				.493				.05	-.012		.398	
.008	-.530				.496				.10	.035	-.046	.389	.406
.015	-.525	-.548	-.560	-.560	.496	.499	.502	.502	.15	.032		.390	
.021	-.529				.496				.20	.018	-.067	.392	.410
.028	-.535				.497				.25	.014	-.076	.393	.412
.034	-.538	-.559	-.578	-.576	.497	.501	.504	.505	.30	-.036	-.062	.404	.409
.042	-.538				.498				.35	-.065	-.091	.409	.415
.051	-.541				.498				.40	-.075	-.052	.412	.407
.068	-.546	-.575	-.582	-.574	.499	.504	.506	.504	.45	-.077	-.042	.412	.405
.085	-.558				.502				.50	-.105	-.014	.417	.399
.102	-.565				.502				.55	I		I	
.136	-.583	-.608	-.618	-.623	.505	.510	.512	.513	.60	-.091	.011	.415	.394
.169	-.597	-.628	-.668	-.636	.509	.514	.520	.515	.65	-.115		.420	
.258	-.572	-.576	-.566	-.576	.504	.504	.502	.505	.70	-.082	.011	.413	.394
.300	-.478	-.450	-.435	-.448	.487	.482	.479	.482	.75	-.010		.398	
.400	-.177	-.132	-.086	-.084	.431	.423	.413	.413	.80	.033	-.002	.389	.396
.500	-.025	.006	.030	.036	.401	.395	.390	.389	.85	.051		.386	
.600	.003	.007	.011	.020	.395	.395	.394	.393	.90	.051		.386	
.700	-.013	-.019	-.022	-.028	.399	.400	.401	.402					
.800	-.037	-.043	-.056	-.063	.405	.405	.407	.409					
.900	-.053	-.064	-.071	-.084	.407	.409	.411	.413					
.950	-.067	-.071	-.082	-.093	.410	.411	.413	.415					
.980	-.082	-.083	-.089	-.102	.413	.413	.414	.417					

TABLE VIII. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.394	-.009	.472	.398
0.000	-.574				.504				.05	-.196		.435	
.008	-.595				.507				.10	-.068	-.029	.410	.403
.015	-.592	-.572	-.519	-.492	.507	.504	.494	.489	.15	-.011		.398	
.021	-.593				.507				.20	.005	-.048	.396	.406
.028	-.595				.508				.25	.010	-.048	.394	.406
.034	-.606	-.591	-.530	-.516	.510	.506	.496	.494	.30	.007	-.038	.395	.404
.042	-.605				.509				.35	-.031	-.056	.402	.407
.051	-.605				.509				.40	-.043	-.026	.405	.402
.068	-.611	-.592	-.544	-.526	.510	.506	.499	.496	.45	-.045	-.007	.405	.398
.085	-.609				.510				.50	-.079	.013	.412	.393
.102	-.622				.512				.55	I		I	
.136	-.634	-.620	-.589	-.568	.515	.512	.507	.503	.60	-.081	.023	.413	.392
.169	-.663	-.648	-.623	-.589	.519	.516	.513	.506	.65	-.099		.416	
.258	-.540	-.568	-.565	-.566	.498	.504	.502	.502	.70	-.066	.025	.410	.391
.300	-.366	-.441	-.478	-.481	.467	.480	.487	.487	.75	.002		.396	
.400	-.029	-.103	-.163	-.192	.402	.417	.428	.434	.80	.049	.016	.386	.392
.500	.019	.015	-.001	-.016	.392	.393	.396	.399	.85	.066		.382	
.600	-.003	.006	.017	.015	.396	.395	.393	.393	.90	.065		.383	
.700	-.028	-.023	-.015	-.009	.402	.401	.399	.398					
.800	-.052	-.041	-.043	-.041	.406	.405	.405	.404					
.900	-.057	-.061	-.065	-.067	.409	.408	.409	.410					
.950	-.071	-.070	-.077	-.083	.411	.410	.412	.413					
.980	-.080	-.082	-.092	-.096	.413	.412	.415	.416					

(d) $M_\infty = 0.40$, $\alpha = 4.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.351	-.018	.464	.400
0.000	-.635				.514				.05	-.200		.435	
.008	-.658				.518				.10	-.098	-.031	.416	.403
.015	-.666	-.646	-.540	-.491	.519	.517	.498	.489	.15	-.016		.399	
.021	-.657				.518				.20	-.004	-.041	.397	.404
.028	-.667				.520				.25	-.003	-.037	.397	.404
.034	-.667	-.658	-.553	-.501	.520	.518	.500	.491	.30	-.000	-.026	.396	.402
.042	-.667				.520				.35	-.006	-.030	.397	.402
.051	-.673				.521				.40	-.025	-.005	.401	.397
.068	-.677	-.654	-.576	-.522	.522	.518	.504	.495	.45	-.027	.015	.402	.393
.085	-.680				.523				.50	-.071	.031	.411	.390
.102	-.689				.525				.55	I		I	
.136	-.730	-.690	-.611	-.580	.530	.524	.510	.505	.60	-.086	.033	.413	.389
.169	-.722	-.706	-.640	-.589	.529	.527	.515	.507	.65	-.098		.416	
.258	-.288	-.542	-.571	-.559	.452	.499	.504	.501	.70	-.058	.036	.408	.388
.300	-.067	-.359	-.485	-.473	.410	.466	.488	.485	.75	.019		.392	
.400	.018	-.052	-.184	-.194	.393	.407	.432	.434	.80	.064	.024	.383	.391
.500	-.025	-.002	-.012	-.021	.401	.397	.399	.400	.85	.081		.379	
.600	-.042	-.022	.006	.014	.405	.401	.395	.394	.90	.079		.380	
.700	-.056	-.048	-.019	-.008	.408	.406	.401	.398					
.800	-.068	-.054	-.052	-.037	.410	.407	.406	.403					
.900	-.071	-.077	-.072	-.066	.411	.412	.410	.409					
.950	-.081	-.089	-.089	-.087	.413	.414	.414	.414					
.980	-.087	-.105	-.112	-.107	.414	.417	.419	.417					

TABLE VIII. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.340	-.013	.462	.399
0.000	-.740				.532				.05	-.192		.435	
.008	-.767				.538				.10	-.116	-.030	.419	.402
.015	-.769	-.757	-.622	-.527	.537	.536	.512	.496	.15	-.050		.406	
.021	-.767				.537				.20	-.033	-.021	.403	.401
.028	-.773				.538				.25	-.032	-.012	.403	.399
.034	-.773	-.750	-.630	-.549	.538	.534	.514	.499	.30	.009	.005	.394	.395
.042	-.778				.539				.35	.009	.011	.394	.394
.051	-.778				.538				.40	-.012	.042	.398	.387
.068	-.800	-.745	-.637	-.583	.542	.533	.515	.505	.45	-.012	.058	.399	.384
.085	-.827				.547				.50	-.078	.066	.412	.382
.102	-.835				.549				.55	I		I	
.136	-.580	-.782	-.672	-.638	.505	.539	.521	.515	.60	-.108	.059	.418	.384
.169	-.191	-.774	-.688	-.647	.434	.538	.524	.516	.65	-.124		.421	
.258	-.027	-.373	-.597	-.559	.402	.467	.508	.501	.70	-.048	.057	.406	.384
.300	-.033	-.227	-.486	-.462	.403	.441	.488	.484	.75	.057		.385	
.400	-.048	-.125	-.181	-.178	.406	.421	.432	.431	.80	.114	.041	.372	.388
.500	-.062	-.103	-.035	-.024	.409	.417	.403	.401	.85	.127		.370	
.600	-.067	-.099	-.022	-.003	.410	.416	.401	.397	.90	.117		.372	
.700	-.069	-.101	-.057	-.029	.410	.416	.408	.402					
.800	-.079	-.101	-.082	-.066	.412	.416	.413	.409					
.900	-.080	-.121	-.110	-.093	.412	.420	.418	.415					
.950	-.092	-.130	-.135	-.123	.415	.422	.423	.421					
.980	-.104	-.154	-.157	-.155	.417	.427	.427	.426					

(f) $M_\infty = 0.60$, $\alpha = -0.1^\circ$, $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.442	-.017	.742	.607
0.000	-.472				.751				.05	-.233		.677	
.008	-.491				.757				.10	-.107	-.050	.637	.618
.015	-.491	-.512	-.530	-.547	.756	.762	.769	.771	.15	-.017		.608	
.021	-.494				.757				.20	-.006	-.078	.605	.626
.028	-.496				.758				.25	-.004	-.088	.604	.629
.034	-.494	-.522	-.551	-.559	.757	.765	.775	.775	.30	-.027	-.070	.611	.624
.042	-.496				.758				.35	-.058	-.101	.622	.634
.051	-.504				.760				.40	-.070	-.064	.626	.622
.068	-.507	-.532	-.559	-.567	.761	.769	.777	.778	.45	-.072	-.041	.626	.614
.085	-.514				.763				.50	-.110	-.009	.638	.604
.102	-.518				.764				.55	I		I	
.136	-.529	-.554	-.572	-.583	.768	.773	.781	.782	.60	-.114	.001	.639	.601
.169	-.545	-.573	-.599	-.585	.773	.780	.790	.783	.65	-.120		.641	
.258	-.563	-.590	-.592	-.599	.779	.785	.787	.788	.70	-.083	-.001	.630	.602
.300	-.532	-.551	-.549	-.547	.769	.772	.774	.771	.75	-.017		.608	
.400	-.363	-.339	-.295	-.274	.716	.707	.696	.688	.80	.017	-.017	.597	.607
.500	-.145	-.089	-.039	-.030	.649	.630	.616	.611	.85	.034		.592	
.600	-.023	.006	.024	.030	.611	.600	.595	.591	.90	.031		.591	
.700	.001	.006	.007	.006	.601	.600	.601	.600					
.800	-.017	-.015	-.030	-.035	.607	.606	.612	.612					
.900	-.037	-.041	-.049	-.064	.614	.615	.618	.622					
.950	-.054	-.057	-.066	-.078	.618	.620	.624	.626					
.980	-.071	-.073	-.076	-.090	.624	.625	.627	.630					

TABLE VIII. - Continued

(g) $M_\infty = 0.70$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.481	.001	.883	.698
0.000	-.463				.876				.05	-.323		.823	
.008	-.472				.879				.10	-.200	-.037	.776	.712
.015	-.477	-.508	-.531	-.546	.882	.891	.902	.906	.15	-.078		.728	
.021	-.481				.881				.20	-.019	-.067	.705	.724
.028	-.482				.881				.25	-.015	-.078	.704	.729
.034	-.486	-.523	-.543	-.549	.883	.896	.907	.907	.30	-.018	-.061	.705	.721
.042	-.486				.883				.35	-.038	-.094	.713	.734
.051	-.492				.886				.40	-.052	-.052	.718	.718
.068	-.493	-.527	-.551	-.566	.885	.898	.910	.913	.45	-.064	-.027	.723	.708
.085	-.499				.888				.50	-.094	.000	.734	.698
.102	-.502				.889				.55	I		I	
.136	-.517	-.548	-.576	-.575	.894	.906	.918	.917	.60	-.104	.009	.738	.694
.169	-.530	-.558	-.588	-.584	.899	.910	.922	.920	.65	-.107		.738	
.258	-.554	-.579	-.589	-.593	.908	.918	.923	.923	.70	-.070	.005	.725	.696
.300	-.541	-.558	-.568	-.563	.904	.910	.914	.911	.75	-.012		.703	
.400	-.427	-.406	-.385	-.363	.860	.853	.845	.836	.80	.022	-.009	.689	.791
.500	-.237	-.185	-.127	-.108	.788	.768	.747	.738	.85	.035		.684	
.600	-.081	-.032	.003	.010	.729	.710	.698	.693	.90	.034		.685	
.700	-.011	.007	.018	.012	.702	.695	.691	.692					
.800	-.007	-.002	-.014	-.029	.701	.699	.703	.707					
.900	-.024	-.033	-.037	-.051	.707	.711	.712	.714					
.950	-.041	-.045	-.054	-.070	.714	.715	.718	.723					
.980	-.059	-.060	-.066	-.078	.722	.720	.723	.728					

(h) $M_\infty = 0.80$, $\alpha = -2.2^\circ$, $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.351	-.023	.959	.808
0.000	-.415				.989				.05	-.166		.872	
.008	-.430				.993				.10	-.086	-.057	.836	.824
.015	-.437	-.602	-.624	-.616	.997	1.078	1.090	1.085	.15	-.050		.819	
.021	-.441				.998				.20	-.047	-.095	.818	.841
.028	-.450				1.002				.25	-.046	-.104	.817	.845
.034	-.458	-.601	-.644	-.630	1.006	1.078	1.098	1.092	.30	-.088	-.077	.835	.832
.042	-.464				1.008				.35	-.100	-.107	.841	.846
.051	-.469				1.011				.40	-.101	-.056	.841	.823
.068	-.479	-.593	-.638	-.639	1.015	1.074	1.095	1.097	.45	-.102	-.023	.842	.809
.085	-.488				1.020				.50	-.125	.010	.852	.793
.102	-.496				1.024				.55	I		I	
.136	-.521	-.606	-.643	-.645	1.037	1.081	1.097	1.100	.60	-.119	.011	.850	.793
.169	-.543	-.614	-.652	-.649	1.047	1.084	1.101	1.102	.65	-.099		.841	
.258	-.568	-.620	-.612	-.592	1.059	1.088	1.081	1.073	.70	-.045	.002	.818	.798
.300	-.551	-.590	-.550	-.517	1.052	1.073	1.050	1.037	.75	.002		.797	
.400	-.453	-.415	-.304	-.267	1.005	.988	.934	.919	.80	.020	-.018	.789	.806
.500	-.298	-.197	-.089	-.073	.934	.886	.836	.831	.85	.034		.783	
.600	-.145	-.055	-.013	-.017	.863	.823	.802	.805	.90	.030		.785	
.700	-.050	-.018	-.022	-.032	.821	.806	.806	.812					
.800	-.018	-.023	-.053	-.062	.806	.809	.820	.827					
.900	-.025	-.047	-.070	-.077	.810	.819	.828	.833					
.950	-.041	-.063	-.084	-.092	.816	.826	.834	.840					
.980	-.062	-.085	-.090	-.101	.826	.837	.838	.844					

TABLE VIII. - Continued

(i) $M_\infty = 0.80$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.504	.025	1.032	.788
0.000	-.457				1.009				.05	-.414		.988	
.008	-.481				1.020				.10	-.313	-.011	.941	.804
.015	-.480	-.508	-.535	-.549	1.019	1.033	1.047	1.053	.15	-.176		.878	
.021	-.485				1.022				.20	-.084	-.043	.836	.818
.028	-.488				1.023				.25	-.049	-.050	.821	.822
.034	-.487	-.522	-.550	-.560	1.023	1.039	1.053	1.058	.30	-.024	-.039	.809	.816
.042	-.491				1.025				.35	-.021	-.065	.808	.828
.051	-.494				1.026				.40	-.023	-.022	.809	.809
.068	-.492	-.527	-.555	-.573	1.025	1.042	1.056	1.065	.45	-.027	-.005	.811	.796
.085	-.498				1.028				.50	-.065	.032	.828	.784
.102	-.503				1.031				.55	I		I	
.136	-.515	-.548	-.568	-.588	1.036	1.052	1.063	1.072	.60	-.071	.031	.830	.784
.169	-.529	-.555	-.586	-.588	1.043	1.057	1.071	1.072	.65	-.072		.831	
.258	-.551	-.576	-.587	-.585	1.054	1.067	1.072	1.071	.70	-.035	.021	.814	.789
.300	-.544	-.562	-.582	-.572	1.050	1.060	1.069	1.065	.75	.013		.792	
.400	-.468	-.467	-.461	-.436	1.014	1.014	1.010	.998	.80	.036	.008	.782	.795
.500	-.326	-.290	-.247	-.222	.947	.930	.910	.899	.85	.047		.777	
.600	-.167	-.120	-.069	-.050	.874	.852	.829	.821	.90	.045		.778	
.700	-.062	-.025	.008	.006	.826	.810	.795	.795					
.800	-.014	.001	.001	-.009	.806	.798	.797	.802					
.900	-.013	-.014	-.020	-.034	.805	.805	.807	.813					
.950	-.025	-.027	-.033	-.051	.810	.810	.813	.821					
.980	-.043	-.045	-.046	-.062	.818	.819	.819	.826					

(j) $M_\infty = 0.80$, $\alpha = 1.9^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.526	.018	1.042	.790
0.000	-.521				1.039				.05	-.469		1.014	
.008	-.547				1.051				.10	-.388	.010	.976	.794
.015	-.547	-.523	-.476	-.474	1.051	1.040	1.017	1.016	.15	-.274		.922	
.021	-.548				1.052				.20	-.169	-.020	.875	.808
.028	-.545				1.051				.25	-.100	-.026	.843	.810
.034	-.546	-.541	-.498	-.485	1.051	1.049	1.028	1.021	.30	-.035	-.016	.814	.805
.042	-.548				1.052				.35	-.017	-.029	.806	.811
.051	-.551				1.054				.40	-.016	.001	.805	.798
.068	-.560	-.545	-.513	-.497	1.058	1.050	1.035	1.028	.45	-.014	.021	.804	.789
.085	-.561				1.058				.50	-.029	.039	.811	.781
.102	-.560				1.058				.55	I		I	
.136	-.566	-.560	-.536	-.519	1.061	1.058	1.046	1.039	.60	-.066	.035	.828	.783
.169	-.575	-.567	-.552	-.527	1.065	1.062	1.054	1.042	.65	-.060		.825	
.258	-.586	-.585	-.563	-.556	1.071	1.071	1.060	1.057	.70	-.028	.033	.811	.783
.300	-.569	-.572	-.560	-.555	1.062	1.064	1.058	1.056	.75	.026		.787	
.400	-.429	-.462	-.473	-.464	.995	1.010	1.016	1.011	.80	.057	.023	.773	.788
.500	-.230	-.270	-.299	-.309	.902	.920	.934	.939	.85	.072		.766	
.600	-.063	-.102	-.127	-.135	.827	.844	.855	.859	.90	.072		.766	
.700	.003	-.013	-.021	-.033	.797	.804	.808	.813					
.800	.000	.007	-.002	-.002	.798	.795	.799	.800					
.900	-.018	-.014	-.015	-.008	.807	.805	.805	.805					
.950	-.032	-.032	-.031	-.033	.813	.813	.812	.817					
.980	-.044	-.047	-.051	-.052	.818	.819	.821	.824					

TABLE VIII. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.519	-.004	1.040	.802
0.000	-.601				1.081				.05	-.451		1.007	
.008	-.624				1.092				.10	-.356	-.005	.962	.801
.015	-.625	-.648	-.520	-.482	1.092	1.104	1.040	1.020	.15	-.252		.914	
.021	-.631				1.095				.20	-.144	-.022	.865	.809
.028	-.633				1.097				.25	-.080	-.026	.836	.810
.034	-.640	-.662	-.544	-.499	1.100	1.111	1.053	1.028	.30	-.028	-.016	.812	.805
.042	-.647				1.104				.35	-.007	-.014	.803	.804
.051	-.652				1.106				.40	.009	.011	.795	.793
.068	-.664	-.650	-.557	-.515	1.111	1.105	1.058	1.036	.45	.006	.033	.797	.783
.085	-.668				1.115				.50	-.031	.050	.814	.776
.102	-.669				1.115				.55	I		I	
.136	-.660	-.659	-.592	-.553	1.110	1.110	1.076	1.054	.60	-.082	.050	.836	.776
.169	-.662	-.662	-.616	-.566	1.111	1.111	1.088	1.061	.65	-.079		.835	
.258	-.553	-.637	-.607	-.584	1.056	1.096	1.083	1.070	.70	-.038	.047	.817	.777
.300	-.438	-.583	-.589	-.563	1.001	1.070	1.075	1.060	.75	.030		.786	
.400	-.195	-.356	-.461	-.441	.888	.961	1.012	1.001	.80	.074	.035	.766	.783
.500	-.063	-.135	-.251	-.257	.828	.859	.913	.915	.85	.096		.757	
.600	-.029	-.040	-.065	-.085	.813	.816	.829	.836	.90	.094		.757	
.700	-.035	-.023	.001	-.007	.815	.808	.799	.801					
.800	-.048	-.026	-.006	-.001	.821	.810	.802	.799					
.900	-.057	-.051	-.035	-.030	.824	.821	.815	.812					
.950	-.066	-.067	-.062	-.055	.828	.829	.827	.823					
.980	-.073	-.085	-.086	-.080	.831	.837	.838	.834					

(l) $M_\infty = 0.80$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.521	.001	1.039	.798
0.000	-.647				1.101				.05	-.427		.994	
.008	-.677				1.116				.10	-.344	-.005	.955	.801
.015	-.676	-.706	-.574	-.531	1.116	1.131	1.065	1.044	.15	-.256		.914	
.021	-.676				1.116				.20	-.144	-.004	.863	.801
.028	-.683				1.119				.25	-.071	.003	.830	.797
.034	-.684	-.713	-.602	-.554	1.120	1.135	1.079	1.055	.30	.016	.020	.791	.789
.042	-.687				1.122				.35	.028	.030	.786	.785
.051	-.698				1.128				.40	.026	.064	.787	.769
.068	-.703	-.703	-.610	-.570	1.131	1.130	1.083	1.063	.45	.009	.083	.794	.761
.085	-.701				1.129				.50	-.030	.097	.811	.755
.102	-.689				1.123				.55	I		I	
.136	-.659	-.704	-.642	-.613	1.108	1.131	1.099	1.084	.60	-.112	.084	.849	.761
.169	-.569	-.707	-.660	-.623	1.063	1.133	1.108	1.090	.65	-.117		.851	
.258	-.266	-.626	-.645	-.628	.919	1.091	1.100	1.092	.70	-.051	.076	.821	.764
.300	-.172	-.513	-.613	-.593	.876	1.036	1.085	1.075	.75	.052		.775	
.400	-.087	-.288	-.456	-.439	.838	.929	1.008	1.000	.80	.122	.056	.743	.773
.500	-.083	-.181	-.210	-.215	.835	.880	.894	.895	.85	.147		.732	
.600	-.075	-.134	-.064	-.054	.832	.859	.827	.822	.90	.138		.736	
.700	-.073	-.106	-.029	-.009	.831	.846	.811	.802					
.800	-.073	-.090	-.049	-.024	.831	.839	.820	.809					
.900	-.076	-.103	-.084	-.059	.833	.845	.836	.825					
.950	-.091	-.115	-.117	-.094	.839	.850	.851	.840					
.980	-.100	-.137	-.145	-.128	.843	.861	.864	.856					

TABLE VIII. - Continued

(m) $M_{\infty} = 0.85$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_{\infty} = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.535	.009	1.122	.844
0.000	-.470				1.087				.05	-.462		1.082	
.008	-.492				1.098				.10	-.374	-.018	1.036	.858
.015	-.494	-.514	-.541	-.560	1.099	1.110	1.125	1.135	.15	-.259		.977	
.021	-.495				1.100				.20	-.162	-.056	.928	.876
.028	-.499				1.102				.25	-.107	-.061	.901	.878
.034	-.499	-.533	-.562	-.567	1.102	1.121	1.137	1.139	.30	-.055	-.046	.876	.871
.042	-.498				1.102				.35	-.044	-.066	.870	.881
.051	-.504				1.104				.40	-.040	-.025	.868	.861
.068	-.508	-.538	-.570	-.576	1.107	1.123	1.141	1.145	.45	-.041	.002	.868	.848
.085	-.509				1.106				.50	-.072	.026	.884	.836
.102	-.517				1.111				.55	I	I	I	I
.136	-.528	-.550	-.580	-.592	1.118	1.130	1.147	1.154	.60	-.072	.021	.884	.838
.169	-.540	-.563	-.593	-.590	1.124	1.137	1.154	1.152	.65	-.072		.884	
.258	-.563	-.584	-.592	-.591	1.137	1.149	1.154	1.152	.70	-.034	.010	.865	.844
.300	-.556	-.575	-.584	-.577	1.133	1.144	1.149	1.145	.75	.005		.846	
.400	-.486	-.489	-.488	-.475	1.095	1.097	1.096	1.088	.80	.020	-.004	.839	.850
.500	-.361	-.343	-.317	-.292	1.029	1.019	1.006	.993	.85	.033		.833	
.600	-.217	-.177	-.127	-.108	.955	.935	.910	.900	.90	.036		.831	
.700	-.093	-.059	-.024	-.019	.894	.877	.860	.857					
.800	-.029	-.008	.001	-.009	.863	.853	.848	.853					
.900	-.015	-.009	-.010	-.027	.856	.853	.854	.861					
.950	-.023	-.022	-.024	-.041	.860	.859	.860	.868					
.980	-.035	-.036	-.035	-.050	.866	.866	.866	.872					

(n) $M_{\infty} = 0.90$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_{\infty} = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.381	-.046	1.112	.923
0.000	-.488				1.175				.05	-.257		1.041	
.008	-.505				1.186				.10	-.182	-.067	.996	.934
.015	-.515	-.665	-.692	-.708	1.186	1.284	1.307	1.312	.15	-.131		.968	
.021	-.527				1.194				.20	-.107	-.107	.956	.955
.028	-.531				1.197				.25	-.090	-.114	.946	.959
.034	-.538	-.695	-.713	-.730	1.201	1.303	1.322	1.327	.30	-.105	-.091	.954	.947
.042	-.540				1.202				.35	-.119	-.122	.962	.963
.051	-.552				1.209				.40	-.120	-.062	.962	.931
.068	-.565	-.694	-.716	-.752	1.218	1.302	1.318	1.343	.45	-.120	-.021	.962	.910
.085	-.581				1.227				.50	-.142	.006	.974	.896
.102	-.595				1.236				.55	I	I	I	I
.136	-.623	-.707	-.724	-.723	1.255	1.311	1.323	1.323	.60	-.125	.005	.964	.896
.169	-.641	-.707	-.729	-.711	1.267	1.311	1.328	1.315	.65	-.104		.953	
.258	-.626	-.653	-.622	-.565	1.257	1.275	1.254	1.217	.70	-.052	-.001	.926	.899
.300	-.587	-.592	-.546	-.485	1.231	1.234	1.205	1.169	.75	-.011		.905	
.400	-.466	-.422	-.347	-.312	1.157	1.131	1.087	1.067	.80	.001	-.016	.898	.907
.500	-.324	-.242	-.163	-.167	1.074	1.028	.985	.987	.85	.018		.889	
.600	-.182	-.105	-.062	-.068	.995	.954	.931	.935	.90	.016		.890	
.700	-.079	-.046	-.043	-.051	.940	.923	.921	.925					
.800	-.035	-.032	-.057	-.070	.917	.916	.929	.935					
.900	-.031	-.053	-.066	-.079	.915	.927	.933	.940					
.950	-.040	-.066	-.074	-.091	.920	.934	.938	.947					
.980	-.059	-.085	-.082	-.096	.929	.943	.942	.949					

TABLE VIII. - Continued

(a) $M_\infty = 0.90$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.100	I	I			I	I			0.00	-.539	-.008	1.201	.903
0.000	-.509				1.182				.05	-.481		1.165	
.008	-.532				1.197				.10	-.410	-.018	1.123	.908
.015	-.535	-.550	-.564	-.575	1.199	1.207	1.216	1.223	.15	-.304		1.063	
.021	-.532				1.197				.20	-.221	-.056	1.016	.928
.028	-.531				1.196				.25	-.156	-.056	.982	.928
.034	-.537	-.568	-.584	-.586	1.200	1.220	1.229	1.231	.30	-.094	-.034	.948	.916
.042	-.534				1.198				.35	-.070	-.056	.935	.928
.051	-.544				1.204				.40	-.055	-.014	.928	.906
.068	-.546	-.569	-.589	-.594	1.206	1.220	1.233	1.236	.45	-.054	.013	.927	.892
.085	-.553				1.210				.50	-.066	.031	.933	.883
.102	-.556				1.212				.55	I		I	
.136	-.565	-.585	-.598	-.604	1.218	1.230	1.238	1.243	.60	-.070	.024	.935	.886
.169	-.578	-.597	-.606	-.609	1.226	1.238	1.243	1.246	.65	-.061		.930	
.258	-.599	-.609	-.609	-.613	1.238	1.245	1.246	1.248	.70	-.025	.017	.911	.890
.300	-.578	-.594	-.594	-.597	1.225	1.236	1.236	1.238	.75	.004		.896	
.400	-.495	-.499	-.501	-.493	1.173	1.176	1.178	1.173	.80	.021	.003	.888	.897
.500	-.380	-.369	-.355	-.348	1.106	1.099	1.092	1.088	.85	.032		.882	
.600	-.252	-.224	-.199	-.180	1.033	1.018	1.004	.994	.90	.034		.881	
.700	-.135	-.102	-.069	-.059	.970	.952	.935	.930					
.800	-.055	-.029	-.018	-.024	.927	.914	.908	.911					
.900	-.022	-.015	-.008	-.020	.910	.907	.903	.909					
.950	-.024	-.020	-.020	-.032	.911	.909	.909	.915					
.980	-.032	-.029	-.026	-.038	.915	.914	.912	.919					

(p) $M_\infty = 0.90$, $\alpha = 1.9^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.100	I	I			I	I			0.00	-.533	-.021	1.197	.909
0.000	-.587				1.231				.05	-.478		1.164	
.008	-.614				1.248				.10	-.420	.004	1.130	.896
.015	-.609	-.585	-.529	-.529	1.246	1.230	1.194	1.195	.15	-.332		1.077	
.021	-.610				1.245				.20	-.241	-.015	1.026	.906
.028	-.617				1.249				.25	-.172	-.020	.988	.909
.034	-.623	-.614	-.556	-.545	1.252	1.249	1.212	1.205	.30	-.096	-.013	.947	.905
.042	-.625				1.253				.35	-.054	-.019	.925	.909
.051	-.624				1.253				.40	-.033	.010	.914	.894
.068	-.629	-.615	-.565	-.558	1.256	1.249	1.218	1.213	.45	-.031	.030	.913	.883
.085	-.641				1.264				.50	-.029	.048	.914	.874
.102	-.636				1.263				.55	I		I	
.136	-.634	-.630	-.594	-.582	1.262	1.259	1.234	1.229	.60	-.054	.046	.927	.875
.169	-.642	-.641	-.622	-.591	1.267	1.266	1.252	1.234	.65	-.049		.924	
.258	-.626	-.628	-.615	-.604	1.257	1.258	1.247	1.243	.70	-.016	.042	.907	.877
.300	-.582	-.598	-.595	-.584	1.228	1.238	1.234	1.229	.75	.031		.882	
.400	-.442	-.476	-.493	-.485	1.142	1.162	1.171	1.168	.80	.060	.034	.868	.881
.500	-.279	-.323	-.350	-.355	1.049	1.073	1.087	1.091	.85	.075		.860	
.600	-.137	-.169	-.200	-.202	.971	.988	1.003	1.006	.90	.076		.859	
.700	-.051	-.064	-.085	-.085	.925	.932	.943	.943					
.800	-.020	-.017	-.023	-.026	.909	.908	.910	.912					
.900	-.016	-.014	-.017	-.019	.907	.906	.907	.908					
.950	-.027	-.021	-.030	-.032	.913	.910	.914	.915					
.980	-.033	-.035	-.042	-.043	.916	.917	.921	.921					

TABLE VIII. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.550	-.023	1.214	.912
0.000	-.708				1.318				.05	-.465		1.161	
.008	-.742				1.342				.10	-.388	-.014	1.116	.908
.015	-.744	-.724	-.582	-.569	1.345	1.326	1.234	1.224	.15	-.279		1.051	
.021	-.747				1.343				.20	-.180	-.030	.996	.916
.028	-.749				1.344				.25	-.116	-.029	.962	.915
.034	-.761	-.745	-.610	-.586	1.352	1.341	1.252	1.233	.30	-.049	-.018	.926	.910
.042	-.764				1.355				.35	-.024	-.019	.913	.910
.051	-.772				1.360				.40	-.013	.006	.907	.898
.068	-.784	-.740	-.629	-.616	1.370	1.338	1.265	1.254	.45	-.012	.029	.907	.885
.085	-.784				1.369				.50	-.030	.051	.916	.874
.102	-.776				1.363				.55	I		I	
.136	-.748	-.756	-.681	-.681	1.343	1.350	1.297	1.297	.60	-.081	.057	.943	.871
.169	-.715	-.753	-.711	-.694	1.320	1.347	1.318	1.305	.65	-.081		.943	
.258	-.546	-.671	-.671	-.669	1.208	1.290	1.289	1.289	.70	-.043	.054	.923	.873
.300	-.456	-.598	-.626	-.622	1.153	1.242	1.260	1.257	.75	.023		.888	
.400	-.265	-.388	-.478	-.466	1.043	1.113	1.166	1.159	.80	.072	.043	.863	.878
.500	-.127	-.196	-.287	-.279	.968	1.005	1.055	1.051	.85	.094		.852	
.600	-.063	-.078	-.111	-.112	.934	.941	.959	.960	.90	.093		.852	
.700	-.051	-.040	-.026	-.027	.927	.922	.914	.914					
.800	-.052	-.038	-.015	-.011	.928	.920	.908	.906					
.900	-.058	-.053	-.035	-.027	.931	.928	.919	.914					
.950	-.067	-.063	-.060	-.052	.936	.934	.932	.928					
.980	-.068	-.081	-.083	-.076	.936	.943	.944	.941					

(r) $M_\infty = 0.90$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.580	-.044	1.227	.920
0.000	-.650				1.272				.05	-.522		1.189	
.008	-.676				1.288				.10	-.457	-.006	1.149	.899
.015	-.679	-.707	-.575	-.547	1.289	1.308	1.223	1.203	.15	-.365		1.095	
.021	-.681				1.290				.20	-.265	.006	1.039	.894
.028	-.681				1.290				.25	-.180	.016	.992	.889
.034	-.684	-.722	-.613	-.573	1.293	1.318	1.246	1.220	.30	-.071	.029	.935	.882
.042	-.686				1.294				.35	-.017	.034	.906	.879
.051	-.686				1.294				.40	.012	.068	.891	.861
.068	-.691	-.710	-.620	-.592	1.297	1.309	1.250	1.232	.45	.011	.087	.891	.852
.085	-.690				1.296				.50	-.014	.100	.904	.845
.102	-.685				1.292				.55	I		I	
.136	-.655	-.713	-.663	-.637	1.273	1.312	1.278	1.260	.60	-.111	.089	.955	.849
.169	-.591	-.715	-.685	-.660	1.231	1.313	1.293	1.276	.65	-.111		.955	
.258	-.401	-.665	-.677	-.673	1.116	1.278	1.287	1.282	.70	-.048	.085	.922	.851
.300	-.324	-.597	-.655	-.656	1.071	1.234	1.273	1.270	.75	.053		.869	
.400	-.181	-.409	-.549	-.537	.993	1.120	1.205	1.194	.80	.115	.065	.837	.861
.500	-.139	-.274	-.351	-.341	.970	1.043	1.087	1.079	.85	.145		.822	
.600	-.106	-.190	-.159	-.142	.952	.998	.981	.970	.90	.146		.821	
.700	-.086	-.133	-.058	-.047	.942	.967	.927	.919					
.800	-.080	-.096	-.044	-.027	.939	.947	.920	.909					
.900	-.074	-.098	-.073	-.051	.935	.948	.935	.922					
.950	-.084	-.110	-.103	-.083	.941	.953	.951	.938					
.980	-.092	-.131	-.132	-.115	.945	.964	.966	.956					

TABLE VIII. - Continued

(s) $M_\infty = 0.92$, $\alpha = -0.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I	I	I	I	I	I	I	0.00	-.531	-.011	1.231	.926
0.000	-.570				1.257				.05	-.452		1.180	
.008	-.604				1.280				.10	-.378	-.019	1.135	.931
.015	-.601	-.603	-.610	-.618	1.277	1.279	1.284	1.289	.15	-.283		1.078	
.021	-.605				1.280				.20	-.201	-.053	1.031	.949
.028	-.609				1.283				.25	-.140	-.055	.997	.950
.034	-.619	-.625	-.641	-.629	1.290	1.294	1.305	1.297	.30	-.093	-.037	.971	.941
.042	-.619				1.290				.35	-.072	-.062	.959	.954
.051	-.617				1.288				.40	-.058	-.017	.952	.930
.068	-.617	-.630	-.641	-.634	1.289	1.298	1.305	1.301	.45	-.059	.009	.952	.916
.085	-.618				1.290				.50	-.065	.034	.956	.902
.102	-.624				1.294				.55	I		I	
.136	-.632	-.647	-.656	-.650	1.299	1.309	1.316	1.312	.60	-.072	.033	.959	.903
.169	-.643	-.656	-.671	-.655	1.306	1.316	1.326	1.315	.65	-.065		.956	
.258	-.640	-.645	-.657	-.647	1.305	1.308	1.317	1.310	.70	-.034	.022	.939	.907
.300	-.608	-.614	-.619	-.615	1.283	1.286	1.290	1.284	.75	.005		.918	
.400	-.487	-.482	-.477	-.482	1.202	1.199	1.196	1.197	.80	.022	.006	.909	.916
.500	-.356	-.341	-.324	-.330	1.122	1.112	1.102	1.104	.85	.038		.900	
.600	-.228	-.207	-.182	-.177	1.047	1.035	1.021	1.015	.90	.038		.900	
.700	-.119	-.095	-.072	-.063	.985	.973	.959	.953					
.800	-.047	-.033	-.023	-.029	.946	.938	.933	.935					
.900	-.022	-.018	-.015	-.026	.933	.930	.929	.933					
.950	-.026	-.020	-.024	-.034	.935	.931	.933	.937					
.980	-.033	-.033	-.031	-.043	.938	.936	.938	.941					

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I	I	I	I	I	I	I	0.00	-.408	-.024	1.178	.952
0.000	-1.327				2.139				.05	-.286		1.103	
.008	-1.445				2.461				.10	-.241	-.051	1.076	.967
.015	-1.456	-1.338	-1.328	-1.378	2.509	2.165	2.140	2.256	.15	-.085		.986	
.021	-1.458				2.515				.20	-.039	-.101	.961	.995
.028	-1.459				2.521				.25	-.038	-.113	.960	1.002
.034	-1.460	-1.449	-1.449	-1.458	2.522	2.482	2.477	2.515	.30	-.077	-.100	.982	.994
.042	-1.460				2.527				.35	-.104	-.154	.997	1.025
.051	-1.460				2.523				.40	-.108	-.137	1.000	1.016
.068	-1.435	-1.175	-1.074	-1.066	2.432	1.871	1.738	1.729	.45	-.123	-.119	1.008	1.005
.085	-1.219				1.937				.50	-.147	-.072	1.021	.979
.102	-1.061				1.722				.55	I		I	
.136	-.892	-.772	-.717	-.707	1.546	1.440	1.396	1.388	.60	-.123	.022	1.008	.926
.169	-.755	-.682	-.594	-.602	1.426	1.369	1.305	1.309	.65	-.116		1.003	
.258	-.544	-.533	-.469	-.447	1.269	1.262	1.218	1.204	.70	-.104	.050	.997	.911
.300	-.446	-.458	-.391	-.382	1.203	1.211	1.168	1.162	.75	-.095		.992	
.400	-.174	-.278	-.306	-.298	1.037	1.098	1.115	1.110	.80	-.062	.034	.973	.920
.500	-.026	-.066	-.088	-.068	.953	.975	.988	.976	.85	-.008		.943	
.600	-.002	-.013	-.021	-.029	.940	.946	.950	.955	.90	.040		.917	
.700	-.008	-.030	-.042	-.048	.943	.955	.962	.965					
.800	-.029	-.045	-.067	-.082	.955	.963	.976	.984					
.900	-.049	-.070	-.081	-.098	.966	.977	.984	.993					
.950	-.067	-.079	-.092	-.107	.976	.983	.990	.998					
.980	-.080	-.091	-.094	-.111	.983	.989	.991	.999					

TABLE VIII. - Continued

(u) $M_\infty = 0.94$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.411	-.030	1.177	.955
0.000	-1.334				2.140				.05	-.250		1.079	
.008	-1.445				2.447				.10	-.165	-.047	1.029	.965
.015	-1.456	-1.327	-1.327	-1.368	2.481	2.140	2.126	2.233	.15	-.052		.967	
.021	-1.454				2.493				.20	-.037	-.083	.959	.985
.028	-1.454				2.497				.25	-.030	-.089	.956	.988
.034	-1.452	-1.437	-1.444	-1.446	2.496	2.441	2.442	2.473	.30	-.062	-.080	.973	.983
.042	-1.452				2.492				.35	-.083	-.127	.985	1.010
.051	-1.451				2.487				.40	-.090	-.114	.988	1.002
.068	-1.285	-1.210	-1.207	-1.216	2.053	1.924	1.910	1.934	.45	-.104	-.103	.997	.996
.085	-1.069				1.733				.50	-.123	-.067	1.007	.976
.102	-.942				1.593				.55	I		I	
.136	-.790	-.779	-.784	-.788	1.456	1.447	1.449	1.454	.60	-.108	.011	.999	.933
.169	-.680	-.699	-.645	-.667	1.367	1.382	1.340	1.358	.65	-.106		.998	
.258	-.531	-.528	-.493	-.466	1.260	1.258	1.234	1.216	.70	-.107	.054	.998	.909
.300	-.458	-.449	-.391	-.379	1.211	1.205	1.168	1.160	.75	-.094		.991	
.400	-.291	-.255	-.246	-.253	1.106	1.084	1.079	1.083	.80	-.058	.046	.971	.913
.500	-.048	-.045	-.055	-.062	.965	.964	.969	.973	.85	-.005		.942	
.600	-.003	-.009	-.017	-.022	.940	.944	.948	.951	.90	.038		.918	
.700	-.011	-.018	-.029	-.039	.945	.949	.955	.960					
.800	-.029	-.032	-.052	-.065	.955	.957	.968	.975					
.900	-.044	-.053	-.067	-.082	.963	.969	.976	.984					
.950	-.056	-.060	-.073	-.090	.970	.972	.979	.988					
.980	-.064	-.065	-.074	-.092	.974	.975	.980	.990					

(v) $M_\infty = 0.94$, $\alpha = 1.9^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.378	-.029	1.162	.953
0.000	-1.324				2.145				.05	-.198		1.053	
.008	-1.440				2.469				.10	-.087	-.042	.989	.962
.015	-1.452	-1.332	-1.319	-1.365	2.512	2.149	2.132	2.235	.15	-.040		.962	
.021	-1.454				2.520				.20	-.023	-.065	.953	.974
.028	-1.454				2.523				.25	-.016	-.070	.950	.977
.034	-1.454	-1.443	-1.437	-1.445	2.523	2.457	2.456	2.480	.30	-.039	-.061	.962	.973
.042	-1.453				2.520				.35	-.061	-.093	.974	.992
.051	-1.394				2.319				.40	-.067	-.078	.976	.984
.068	-1.095	-1.200	-1.410	-1.412	1.762	1.908	2.366	2.370	.45	-.084	-.069	.985	.979
.085	-.953				1.605				.50	-.105	-.036	.997	.961
.102	-.832				1.491				.55	I		I	
.136	-.701	-.777	-.846	-.868	1.384	1.444	1.507	1.528	.60	-.100	.033	.994	.922
.169	-.610	-.714	-.692	-.728	1.315	1.389	1.380	1.408	.65	-.100		.994	
.258	-.503	-.539	-.519	-.474	1.241	1.264	1.254	1.223	.70	-.093	.073	.991	.900
.300	-.449	-.465	-.384	-.365	1.205	1.215	1.166	1.153	.75	-.082		.984	
.400	-.342	-.273	-.185	-.195	1.137	1.095	1.045	1.051	.80	-.047	.066	.965	.904
.500	-.045	-.058	-.029	-.036	.963	.972	.955	.961	.85	.013		.932	
.600	-.000	-.011	-.006	-.017	.938	.946	.942	.949	.90	.063		.904	
.700	-.017	-.019	-.025	-.029	.948	.951	.952	.957					
.800	-.036	-.031	-.047	-.055	.957	.957	.965	.971					
.900	-.049	-.050	-.061	-.072	.966	.968	.973	.981					
.950	-.057	-.057	-.071	-.084	.970	.972	.978	.987					
.980	-.061	-.064	-.078	-.088	.972	.976	.982	.989					

TABLE VIII. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I			I	I			0.00	-.264	-.018	1.087	.949
0.000	-1.341				2.157				.05	-.062		.971	
.008	-1.460				2.500				.10	-.025	-.034	.950	.959
.015	-1.472	-1.342	-1.337	-1.373	2.548	2.168	2.149	2.257	.15	-.013		.944	
.021	-1.473				2.548				.20	-.004	-.056	.939	.971
.028	-1.474				2.551				.25	.000	-.060	.936	.973
.034	-1.471	-1.452	-1.458	-1.452	2.541	2.487	2.493	2.515	.30	-.024	-.048	.950	.966
.042	-1.354				2.183				.35	-.042	-.068	.960	.978
.051	-1.147				1.824				.40	-.048	-.046	.963	.966
.068	-.966	-1.158	-1.470	-1.455	1.611	1.844	2.539	2.521	.45	-.065	-.022	.972	.952
.085	-.835				1.489				.50	-.084	.017	.983	.931
.102	-.724				1.397				.55	I		I	
.136	-.615	-.765	-.909	-.946	1.317	1.436	1.556	1.603	.60	-.109	.071	.999	.902
.169	-.543	-.718	-.745	-.791	1.267	1.399	1.414	1.460	.65	-.104		.996	
.258	-.467	-.554	-.554	-.471	1.215	1.278	1.272	1.222	.70	-.093	.095	.990	.888
.300	-.431	-.495	-.383	-.340	1.193	1.237	1.160	1.138	.75	-.066		.975	
.400	-.358	-.280	-.139	-.141	1.146	1.100	1.015	1.020	.80	-.010	.082	.944	.895
.500	-.174	-.078	-.034	-.023	1.036	.983	.955	.953	.85	.066		.902	
.600	-.011	-.021	-.009	-.002	.944	.952	.941	.941	.90	.123		.872	
.700	-.014	-.028	-.022	-.023	.947	.956	.949	.952					
.800	-.037	-.040	-.046	-.052	.960	.963	.963	.968					
.900	-.054	-.064	-.067	-.074	.970	.976	.975	.979					
.950	-.067	-.077	-.083	-.089	.977	.983	.984	.988					
.980	-.070	-.085	-.096	-.104	.979	.988	.992	.996					

(x) $M_\infty = 0.94$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	I	I			I	I			0.00	-.154	-.010	1.025	.944
0.000	-1.344				2.179				.05	-.060		.972	
.008	-1.463				2.531				.10	-.024	-.033	.951	.957
.015	-1.478	-1.369	-1.353	-1.402	2.590	2.239	2.199	2.324	.15	-.001		.939	
.021	-1.471				2.569				.20	.009	-.045	.934	.963
.028	-1.288				2.060				.25	.011	-.044	.933	.963
.034	-1.101	-1.484	-1.478	-1.487	1.771	2.623	2.594	2.629	.30	-.003	-.029	.940	.954
.042	-.975				1.626				.35	-.020	-.027	.949	.953
.051	-.875				1.529				.40	-.019	.015	.949	.930
.068	-.705	-1.124	-1.496	-1.495	1.386	1.800	2.674	2.663	.45	-.044	.056	.963	.907
.085	-.588				1.299				.50	-.074	.095	.980	.886
.102	-.497				1.236				.55	I		I	
.136	-.422	-.734	-.985	-1.094	1.188	1.409	1.638	1.758	.60	-.123	.115	1.007	.875
.169	-.383	-.729	-.812	-.895	1.162	1.405	1.474	1.546	.65	-.126		1.009	
.258	-.374	-.615	-.645	-.414	1.157	1.319	1.341	1.182	.70	-.104	.113	.997	.877
.300	-.360	-.586	-.343	-.254	1.148	1.298	1.137	1.083	.75	-.018		.949	
.400	-.323	-.330	-.151	-.096	1.125	1.129	1.023	.992	.80	.086	.088	.891	.890
.500	-.287	-.081	-.070	-.027	1.103	.983	.978	.954	.85	.161		.851	
.600	.004	-.053	-.046	-.005	.936	.967	.964	.941	.90	.191		.834	
.700	-.015	-.069	-.061	-.018	.947	.976	.972	.948					
.800	-.045	-.080	-.086	-.049	.963	.982	.987	.966					
.900	-.064	-.106	-.108	-.076	.975	.997	.999	.981					
.950	-.081	-.119	-.126	-.102	.983	1.005	1.009	.996					
.980	-.092	-.134	-.143	-.132	.990	1.013	1.019	1.013					

TABLE VIII. - Concluded

(y) $M_\infty = 0.96$, $\alpha = -0.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	I	I			I	I			0.00	-.397	-.192	1.200	1.070
0.000	-1.268				2.147				.05	-.266		1.116	
.008	-1.377				2.452				.10	-.251	-.046	1.107	.985
.015	-1.388	-1.273	-1.260	-1.308	2.495	2.152	2.128	2.242	.15	-.259		1.112	
.021	-1.390				2.502				.20	-.238	-.059	1.099	.993
.028	-1.390				2.504				.25	-.218	-.062	1.086	.994
.034	-1.391	-1.383	-1.375	-1.387	2.504	2.449	2.447	2.483	.30	-.244	-.053	1.103	.989
.042	-1.388				2.497				.35	-.235	-.099	1.098	1.015
.051	-1.384				2.492				.40	-.141	-.088	1.042	1.009
.068	-1.235	-1.173	-1.163	-1.173	2.083	1.951	1.945	1.959	.45	-.101	-.081	1.019	1.005
.085	-1.022				1.749				.50	-.104	-.050	1.019	.986
.102	-.904				1.610				.55	I		I	
.136	-.757	-.744	-.748	-.756	1.471	1.460	1.464	1.469	.60	-.082	.026	1.006	.943
.169	-.651	-.663	-.615	-.637	1.384	1.392	1.355	1.371	.65	-.076		1.003	
.258	-.510	-.505	-.474	-.447	1.278	1.274	1.252	1.232	.70	-.077	.073	1.002	.917
.300	-.442	-.431	-.377	-.364	1.230	1.223	1.187	1.177	.75	-.068		.997	
.400	-.313	-.284	-.273	-.277	1.145	1.127	1.122	1.122	.80	-.042	.068	.981	.920
.500	-.248	-.234	-.230	-.237	1.102	1.097	1.096	1.098	.85	.003		.955	
.600	-.188	-.198	-.201	-.216	1.066	1.074	1.078	1.085	.90	.042		.935	
.700	-.153	-.125	-.138	-.190	1.047	1.030	1.038	1.070					
.800	-.077	-.060	-.067	-.115	1.003	.993	.997	1.025					
.900	-.034	-.045	-.054	-.075	.978	.984	.990	1.002					
.950	-.037	-.043	-.053	-.066	.980	.982	.989	.996					
.980	-.041	-.041	-.049	-.060	.982	.982	.987	.993					

TABLE IX. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 5

(a) $M_\infty = 0.40$, $\alpha = -2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.62$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.913	I			.135	I			0.00	-.041	-.033	.407	.405
0.000	-.901				.562				.05	-.028		.404	
.008	-.917				.565				.10	-.030	-.057	.405	.410
.015	-.897	-.562	-.315	-.288	.562	.504	.460	.455	.15	-.087		.416	
.021	-.868				.557				.20	-.097	-.059	.418	.411
.028	-.805				.547				.25	-.099	-.055	.418	.409
.034	-.718	-.257	-.232	-.205	.532	.449	.444	.439	.30	-.126	-.038	.423	.406
.042	-.525				.498				.35	-.154	-.060	.429	.411
.051	-.364				.469				.40	-.153	-.058	.429	.410
.068	-.182	-.187	-.147	-.142	.435	.435	.428	.427	.45	-.138	-.047	.426	.408
.085	-.145				.428				.50	-.115	-.040	.421	.406
.102	-.144				.427				.55	-.035		.406	
.136	-.142	-.139	-.117	-.110	.427	.426	.422	.420	.60	-.054	-.038	.409	.406
.169	-.133	-.141	-.107	-.084	.425	.427	.420	.415	.65	-.012		.401	
.258	-.114	-.112	-.089	-.088	.421	.421	.416	.416	.70	.009	I	.397	I
.300	-.095	-.086	-.062	-.067	.417	.416	.411	.412	.75	.015		.395	
.400	-.075	-.074	-.066	-.077	.413	.413	.412	.414	.80	.004	-.044	.397	.407
.500	-.092	-.132	-.098	-.113	.417	.419	.418	.420	.85	-.001		.398	
.600	-.089	-.103	-.120	-.126	.416	.419	.423	.423	.90	.000		.398	
.700	-.072	-.091	-.113	-.142	.413	.417	.421	.427					
.800	-.043	-.072	-.097	-.120	.407	.413	.418	.422					
.900	-.004	-.029	-.061	-.064	.399	.404	.411	.411					
.950	.032	.014	-.018	I	.392	.395	.402	I					
.980	.060	.045	.311	I	.385	.389	.396	I					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.62$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.853	I			.164	I			0.00	-.043	-.035	.408	.406
0.000	-1.222				.616				.05	-.030		.405	
.008	-.991				.578				.10	-.030	-.047	.405	.408
.015	-.694	-.717	-.494	-.660	.528	.531	.493	.522	.15	-.075		.413	
.021	-.425				.480				.20	-.082	-.040	.415	.406
.028	-.284				.454				.25	-.083	-.024	.415	.403
.034	-.248	-.247	-.230	-.230	.447	.447	.444	.444	.30	-.108	-.017	.420	.402
.042	-.211				.440				.35	-.122	-.033	.423	.405
.051	-.199				.438				.40	-.117	-.028	.422	.404
.068	-.185	-.185	-.168	-.171	.435	.436	.433	.432	.45	-.107	-.022	.420	.403
.085	-.170				.432				.50	-.084	-.015	.415	.401
.102	-.158				.430				.55	-.009		.400	
.136	-.146	-.135	-.127	-.123	.428	.425	.424	.423	.60	-.033	-.023	.406	.403
.169	-.133	-.140	-.113	-.092	.426	.426	.421	.417	.65	.003		.398	
.258	-.114	-.137	-.091	-.087	.421	.420	.417	.416	.70	.021	I	.394	I
.300	-.097	-.081	-.066	-.065	.418	.415	.412	.411	.75	.030		.392	
.400	-.078	-.067	-.064	-.070	.414	.412	.411	.413	.80	.025	-.026	.393	.404
.500	-.095	-.099	-.096	-.100	.418	.418	.418	.419	.85	.011		.396	
.600	-.101	-.100	-.113	-.110	.419	.419	.421	.421	.90	.012		.396	
.700	-.081	-.087	-.102	-.120	.415	.416	.419	.423					
.800	-.057	-.065	-.083	-.102	.410	.412	.415	.419					
.900	-.017	-.022	-.046	-.057	.402	.403	.408	.410					
.950	.023	.019	-.008	I	.393	.394	.400	I					
.980	.056	.049	.019	I	.387	.388	.394	I					

TABLE IX. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.62$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.808	I			.183	I			0.00	-.053	-.042	.438	.407
0.000	-1.692				.687				.05	-.033		.405	
.008	-.406				.476				.10	-.034	-.042	.406	.406
.015	-.276	-.527	-.939	-.910	.453	.498	.568	.564	.15	-.070		.413	
.021	-.256				.449				.20	-.073	-.029	.413	.404
.028	-.222				.442				.25	-.074	-.017	.413	.401
.034	-.211	-.275	-.406	-.511	.440	.452	.477	.495	.30	-.093	-.002	.417	.399
.042	-.186				.435				.35	-.103	-.016	.419	.401
.051	-.171				.433				.40	-.100	-.011	.419	.401
.068	-.159	-.190	-.160	-.154	.430	.436	.431	.429	.45	-.084	-.008	.415	.400
.085	-.146				.428				.50	-.065	-.007	.411	.399
.102	-.138				.426				.55	.003		.398	
.136	-.131	-.138	-.132	-.125	.425	.426	.425	.424	.60	-.017	-.018	.432	.402
.169	-.120	-.146	-.118	-.098	.423	.428	.422	.417	.65	.010		.396	
.258	-.107	-.111	-.092	-.087	.420	.420	.417	.416	.70	.028	I	.393	I
.300	-.090	-.083	-.066	-.067	.417	.415	.412	.412	.75	.030		.392	
.400	-.075	-.069	-.064	-.065	.414	.412	.412	.411	.80	.025	-.022	.393	.402
.500	-.097	-.099	-.091	-.096	.418	.418	.417	.418	.85	.014		.396	
.600	-.105	-.099	-.103	-.097	.420	.418	.419	.418	.90	.013		.396	
.700	-.091	-.086	-.091	-.106	.417	.416	.416	.419					
.800	-.068	-.067	-.072	-.089	.412	.412	.413	.416					
.900	-.031	-.024	-.036	-.041	.404	.403	.406	.407					
.950	.010	.019	.000	I	.396	.394	.398	I					
.980	.049	.047	.024	I	.388	.388	.393	I					

(d) $M_\infty = 0.40$, $\alpha = 4.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.62$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.716	I			.217	I			0.00	-.056	-.043	.410	.407
0.000	-.976				.575				.05	-.035		.406	
.008	-.248				.447				.10	-.034	-.042	.405	.406
.015	-.177	-.539	-.928	-.803	.433	.509	.567	.546	.15	-.061		.411	
.021	-.159				.430				.20	-.059	-.019	.410	.402
.028	-.136				.425				.25	-.057	-.010	.410	.401
.034	-.140	-.286	-.790	-.799	.426	.454	.544	.546	.30	-.071	.007	.413	.397
.042	-.113				.421				.35	-.077	.002	.414	.399
.051	-.114				.422				.40	-.072	.000	.413	.398
.068	-.117	-.202	-.202	-.312	.422	.439	.438	.459	.45	-.061	.004	.411	.397
.085	-.111				.421				.50	-.041	.004	.406	.397
.102	-.107				.420				.55	.019		.394	
.136	-.106	-.147	-.136	-.106	.420	.428	.425	.419	.60	-.003	-.010	.399	.400
.169	-.101	-.157	-.120	-.088	.419	.430	.422	.416	.65	.019		.394	
.258	-.100	-.120	-.096	-.082	.419	.422	.417	.415	.70	.028	I	.393	I
.300	-.083	-.091	-.066	-.061	.415	.417	.412	.411	.75	.033		.391	
.400	-.069	-.078	-.061	-.062	.412	.414	.411	.411	.80	.030	-.020	.392	.403
.500	-.094	-.106	-.086	-.084	.417	.420	.416	.415	.85	.017		.395	
.600	-.106	-.108	-.096	-.099	.420	.420	.418	.417	.90	.014		.396	
.700	-.093	-.094	-.084	-.093	.417	.417	.415	.417					
.800	-.072	-.073	-.063	-.072	.413	.413	.411	.413					
.900	-.044	-.030	-.026	-.030	.407	.404	.404	.404					
.950	.003	.013	.005	I	.398	.395	.397	I					
.980	.041	.043	.027	I	.390	.390	.393	I					

TABLE IX. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.62$

X/L	C _p AT PHI =				ML AT PHI =				X/C	C _p		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.487	I			.286	I			0.00	-.035	-.035	.406	.406
0.000	.309				.331				.05	-.021		.403	
.008	.080				.382				.10	-.022	-.024	.403	.404
.015	.059	-.486	-.860	-.745	.386	.491	.556	.536	.15	-.038		.406	
.021	.036				.391				.20	-.039	-.001	.406	.399
.028	.006				.397				.25	-.038	.010	.407	.396
.034	.000	-.325	-.886	-.763	.399	.462	.560	.539	.30	-.038	.024	.406	.393
.042	.012				.396				.35	-.039	.024	.406	.393
.051	.005				.397				.40	-.036	.023	.406	.393
.068	-.019	-.237	-.603	-.730	.403	.445	.512	.533	.45	-.038	.021	.406	.394
.085	-.030				.405				.50	-.010	.020	.400	.395
.102	-.040				.406				.55	.039		.390	
.136	-.056	-.185	-.168	-.190	.410	.435	.432	.436	.60	.014	-.002	.396	.399
.169	-.060	-.206	-.143	-.089	.411	.439	.427	.417	.65	.037		.390	
.258	-.073	-.155	-.102	-.066	.413	.430	.420	.412	.70	.040	I	.390	I
.300	-.058	-.126	-.066	-.048	.410	.424	.412	.408	.75	.043		.390	
.400	-.047	-.114	-.358	-.049	.408	.422	.410	.408	.80	.039	-.007	.390	.400
.500	-.080	-.139	-.076	-.071	.415	.426	.414	.413	.85	.026		.393	
.600	-.103	-.134	-.385	-.074	.419	.425	.416	.414	.90	.023		.394	
.700	-.093	-.122	-.071	-.076	.418	.422	.413	.414					
.800	-.080	-.103	-.357	-.059	.415	.419	.410	.410					
.900	-.053	-.055	-.021	-.021	.409	.410	.403	.403					
.950	-.312	-.313	.007	I	.401	.401	.397	I					
.980	.024	.019	.027	I	.394	.395	.392	I					

(f) $M_\infty = 0.60$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.63$

X/L	C _p AT PHI =				ML AT PHI =				X/C	C _p		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.915	I			.228	I			0.00	-.058	-.047	.619	.617
0.000	-1.142				.953				.05	-.036		.612	
.008	-1.033				.919				.10	-.046	-.057	.616	.620
.015	-.893	-.856	-.811	-.823	.876	.867	.851	.856	.15	-.088		.629	
.021	-.701				.818				.20	-.094	-.046	.631	.617
.028	-.511				.760				.25	-.094	-.036	.631	.613
.034	-.389	-.347	-.285	-.318	.722	.711	.690	.702	.30	-.124	-.021	.640	.629
.042	-.263				.683				.35	-.137	-.035	.644	.613
.051	-.207				.666				.40	-.135	-.028	.643	.611
.068	-.186	-.186	-.173	-.169	.660	.661	.655	.656	.45	-.120	-.028	.640	.611
.085	-.172				.656				.50	-.092	-.024	.631	.610
.102	-.159				.653				.55	-.019		.608	
.136	-.154	-.145	-.135	-.131	.651	.648	.644	.644	.60	-.029	-.030	.611	.612
.169	-.136	-.148	-.120	-.099	.645	.649	.639	.634	.65	.003		.601	
.258	-.119	-.115	-.097	-.394	.640	.639	.632	.632	.70	.020	I	.595	I
.300	-.100	-.085	-.071	-.069	.634	.629	.623	.625	.75	.024		.594	
.400	-.080	-.073	-.067	-.070	.628	.625	.622	.625	.80	.017	-.020	.596	.609
.500	-.100	-.106	-.104	-.103	.634	.635	.634	.636	.85	.007		.600	
.600	-.106	-.106	-.121	-.112	.636	.636	.640	.638	.90	.004		.601	
.700	-.088	-.090	-.107	-.122	.630	.631	.636	.642					
.800	-.063	-.074	-.090	-.107	.621	.626	.631	.637					
.900	-.019	-.027	-.045	-.056	.609	.611	.616	.620					
.950	.326	.321	-.007	I	.594	.595	.604	I					
.980	.061	.054	.022	I	.582	.585	.595	I					

TABLE IX. - Continued

(g) $M_\infty = 0.70$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.63$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.958	I			.248	I			0.00	-.057	-.051	.720	.716
0.000	-1.189				1.169				.05	-.040		.714	
.008	-1.057				1.111				.10	-.046	-.062	.716	.720
.015	-.913	-.873	-.829	-.847	1.051	1.032	1.016	1.021	.15	-.091		.732	
.021	-.772				.994				.20	-.102	-.047	.737	.714
.028	-.638				.941				.25	-.101	-.036	.736	.710
.034	-.485	-.432	-.397	-.405	.881	.860	.849	.849	.30	-.121	-.017	.744	.733
.042	-.348				.829				.35	-.139	-.031	.751	.708
.051	-.250				.793				.40	-.134	-.028	.749	.738
.068	-.191	-.193	-.181	-.180	.770	.769	.767	.766	.45	-.119	-.023	.743	.706
.085	-.172				.763				.50	-.090	-.018	.732	.705
.102	-.162				.760				.55	-.011		.702	
.136	-.155	-.148	-.141	-.133	.757	.752	.751	.748	.60	-.027	-.028	.707	.708
.169	-.144	-.153	-.127	-.098	.751	.754	.746	.735	.65	.010		.693	
.258	-.126	-.118	-.103	-.095	.744	.741	.736	.734	.70	.024	I	.687	I
.300	-.104	-.086	-.067	-.067	.735	.729	.723	.723	.75	.028		.686	
.400	-.083	-.074	-.067	-.075	.728	.724	.724	.726	.80	.019	-.018	.689	.705
.500	-.107	-.109	-.102	-.106	.737	.738	.737	.738	.85	.008		.693	
.600	-.111	-.112	-.122	-.120	.738	.739	.744	.743	.90	.010		.692	
.700	-.089	-.097	-.109	-.132	.730	.734	.739	.748					
.800	-.061	-.074	-.089	-.110	.719	.726	.732	.740					
.900	-.016	-.022	-.048	-.055	.702	.706	.715	.718					
.950	.032	.026	-.037	I	.684	.688	.699	I					
.980	.070	.062	.026	I	.670	.674	.686	I					

(h) $M_\infty = 0.80$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.041	I			.235	I			0.00	-.059	-.047	.827	.821
0.000	-.958				1.273				.05	-.041		.819	
.008	-.925				1.254				.10	-.073	-.067	.833	.830
.015	-.905	-1.166	-.672	-.496	1.243	1.402	1.117	1.029	.15	-.104		.847	
.021	-.876				1.226				.20	-.110	-.065	.850	.829
.028	-.839				1.206				.25	-.128	-.046	.859	.821
.034	-.798	-.256	-.277	-.237	1.184	.916	.926	.907	.30	-.153	-.030	.869	.813
.042	-.747				1.156				.35	-.178	-.049	.881	.822
.051	-.683				1.123				.40	-.171	-.046	.878	.821
.068	-.542	-.231	-.200	-.196	1.052	.935	.891	.889	.45	-.157	-.039	.872	.818
.085	-.389				.979				.50	-.127	-.031	.857	.814
.102	-.262				.919				.55	-.031		.814	
.136	-.148	-.175	-.147	-.136	.867	.879	.867	.862	.60	-.037	-.030	.816	.814
.169	-.130	-.169	-.126	-.101	.859	.876	.857	.845	.65	.009		.796	
.258	-.118	-.128	-.106	-.100	.853	.858	.848	.845	.70	.024	I	.789	I
.300	-.100	-.092	-.072	-.071	.845	.842	.833	.832	.75	.023		.790	
.400	-.082	-.076	-.075	-.077	.837	.835	.834	.834	.80	.010	-.013	.795	.806
.500	-.105	-.122	-.117	-.121	.848	.855	.853	.854	.85	-.004		.802	
.600	-.109	-.126	-.144	-.139	.849	.857	.865	.863	.90	.003		.798	
.700	-.088	-.112	-.134	-.154	.840	.851	.861	.870					
.800	-.048	-.084	-.114	-.136	.821	.838	.852	.861					
.900	.033	-.027	-.063	-.072	.799	.812	.828	.833					
.950	.050	.030	-.013	I	.777	.787	.806	I					
.980	.084	.071	.027	I	.762	.768	.788	I					

TABLE IX. - Continued

(i) $M_\infty = 0.80$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.036	I			.267	I			0.00	-.062	-.053	.827	.824
0.000	-1.657				1.813				.05	-.041		.817	
.008	-1.421				1.587				.10	-.059	-.059	.825	.827
.015	-1.282	-1.167	-1.147	-1.210	1.479	1.403	1.387	1.432	.15	-.094		.841	
.021	-.995				1.293				.20	-.105	-.045	.846	.821
.028	-.466				1.014				.25	-.118	-.027	.852	.812
.034	-.277	-.238	-.230	-.190	.925	.908	.903	.886	.30	-.135	-.008	.860	.804
.042	-.188				.884				.35	-.149	-.020	.867	.809
.051	-.200				.891				.40	-.143	-.018	.865	.808
.068	-.201	-.211	-.197	-.196	.891	.896	.888	.889	.45	-.126	-.018	.857	.808
.085	-.193				.888				.50	-.093	-.016	.842	.808
.102	-.182				.883				.55	-.010		.805	
.136	-.177	-.165	-.152	-.147	.881	.875	.868	.867	.60	-.017	-.026	.808	.812
.169	-.153	-.167	-.134	-.108	.869	.876	.860	.849	.65	.020		.791	
.258	-.134	-.125	-.108	-.102	.861	.857	.847	.846	.70	.033	I	.785	I
.300	-.107	-.090	-.072	-.068	.849	.841	.831	.831	.75	.036		.784	
.400	-.081	-.073	-.070	-.069	.837	.833	.832	.831	.80	.024	-.005	.789	.802
.500	-.115	-.116	-.111	-.114	.852	.852	.851	.852	.85	.013		.795	
.600	-.119	-.117	-.132	-.122	.855	.853	.860	.856	.90	.009		.796	
.700	-.097	-.103	-.119	-.137	.844	.847	.854	.863					
.800	-.066	-.079	-.099	-.114	.830	.836	.845	.852					
.900	-.012	-.023	-.045	-.055	.806	.811	.821	.825					
.950	.040	.032	-.001	I	.782	.786	.801	I					
.980	.083	.073	.037	I	.763	.767	.784	I					

(j) $M_\infty = 0.80$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.952	I			.309	I			0.00	-.067	-.053	.830	.824
0.000	-1.531				1.661				.05	-.040		.818	
.008	-1.166				1.403				.10	-.060	-.051	.828	.824
.015	-.640	-1.174	-1.311	-1.425	1.102	1.408	1.504	1.595	.15	-.089		.841	
.021	-.272				.925				.20	-.092	-.028	.842	.813
.028	-.223				.902				.25	-.091	-.006	.841	.803
.034	-.232	-.250	-.357	-.438	.906	.914	.964	1.002	.30	-.108	.013	.849	.794
.042	-.201				.891				.35	-.124	.001	.856	.800
.051	-.228				.904				.40	-.117	.002	.853	.800
.068	-.202	-.215	-.186	-.176	.892	.898	.885	.880	.45	-.094	.000	.843	.800
.085	-.183				.883				.50	-.066	.001	.830	.799
.102	-.172				.878				.55	.011		.796	
.136	-.163	-.163	-.158	-.151	.874	.874	.872	.869	.60	.003	-.019	.799	.808
.169	-.140	-.172	-.140	-.111	.864	.879	.864	.849	.65	.030		.787	
.258	-.128	-.128	-.107	-.100	.858	.858	.849	.844	.70	.040	I	.783	I
.300	-.103	-.091	-.067	-.067	.847	.841	.831	.830	.75	.042		.781	
.400	-.079	-.072	-.070	-.067	.836	.833	.832	.829	.80	.032	-.002	.786	.800
.500	-.113	-.114	-.104	-.106	.851	.852	.847	.847	.85	.019		.792	
.600	-.124	-.114	-.120	-.115	.857	.852	.854	.851	.90	.017		.793	
.700	-.103	-.099	-.107	-.120	.847	.845	.849	.853					
.800	-.078	-.077	-.082	-.097	.836	.835	.838	.842					
.900	-.031	-.021	-.027	-.039	.814	.808	.812	.817					
.950	.026	.031	.012	I	.788	.785	.795	I					
.980	.076	.071	.044	I	.766	.767	.781	I					

TABLE IX. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.63$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.896	I			.349	I			0.00	-.052	-.053	.822	.823
0.000	-1.227				1.440				.05	-.031		.813	
.008	-.459				1.010				.10	-.034	-.038	.814	.816
.015	-.222	-1.173	-.987	-.794	.899	1.402	1.287	1.179	.15	-.071		.831	
.021	-.219				.898				.20	-.075	-.010	.832	.834
.028	-.211				.894				.25	-.073	.012	.831	.794
.034	-.205	-.312	-.816	-.800	.891	.941	1.190	1.182	.30	-.084	.029	.836	.786
.042	-.162				.872				.35	-.089	.018	.839	.790
.051	-.192				.886				.40	-.077	.020	.834	.789
.068	-.170	-.275	-.494	-.673	.876	.923	1.027	1.115	.45	-.057	.017	.824	.791
.085	-.152				.867				.50	-.033	.015	.813	.794
.102	-.146				.864				.55	.030		.786	
.136	-.148	-.186	-.174	-.166	.866	.883	.877	.874	.60	.021	-.006	.769	.834
.169	-.130	-.195	-.135	-.076	.857	.887	.859	.835	.65	.045		.778	
.258	-.123	-.137	-.099	-.072	.854	.861	.843	.833	.70	.048	I	.777	I
.300	-.098	-.098	-.066	-.055	.843	.843	.828	.825	.75	.048		.778	
.400	-.075	-.080	-.066	-.064	.833	.835	.829	.829	.80	.041	.003	.780	.799
.500	-.111	-.121	-.098	-.093	.849	.853	.843	.842	.85	.030		.785	
.600	-.125	-.125	-.108	-.099	.855	.855	.847	.845	.90	.021		.790	
.700	-.111	-.106	-.095	-.105	.849	.847	.841	.848					
.800	-.089	-.083	-.072	-.080	.839	.836	.832	.837					
.900	-.045	-.026	-.020	-.027	.819	.812	.808	.812					
.950	.011	.027	.020	I	.794	.788	.790	I					
.980	.064	.069	.050	I	.770	.769	.776	I					

(l) $M_\infty = 0.80$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.696	I			.467	I			0.00	-.015	-.031	.807	.813
0.000	.160				.728				.05	-.008		.834	
.008	.061				.773				.10	-.014	-.016	.806	.806
.015	.059	-.771	-.834	-.750	.773	1.167	1.203	1.155	.15	-.040		.818	
.021	.024				.789				.20	-.040	.014	.818	.792
.028	.003				.799				.25	-.039	.031	.818	.785
.034	-.020	-.447	-.847	-.769	.809	1.004	1.210	1.165	.30	-.044	.044	.820	.779
.042	-.009				.805				.35	-.045	.039	.821	.781
.051	-.038				.818				.40	-.040	.042	.818	.780
.068	-.055	-.353	-.718	-.763	.825	.959	1.141	1.162	.45	-.024	.035	.811	.783
.085	-.067				.831				.50	.002	.030	.799	.786
.102	-.071				.833				.55	.061		.773	
.136	-.092	-.263	-.359	-.440	.842	.918	.964	1.001	.60	.043	.003	.781	.798
.169	-.086	-.281	-.239	-.261	.839	.927	.908	.918	.65	.058		.773	
.258	-.100	-.194	-.117	-.074	.844	.886	.853	.832	.70	.057	I	.774	I
.300	-.080	-.147	-.069	-.045	.835	.865	.832	.819	.75	.053		.775	
.400	-.060	-.122	-.059	-.047	.826	.854	.827	.820	.80	.043	.012	.779	.793
.500	-.102	-.159	-.086	-.078	.845	.870	.839	.834	.85	.033		.784	
.600	-.124	-.157	-.098	-.085	.854	.869	.845	.837	.90	.029		.786	
.700	-.113	-.135	-.081	-.089	.850	.860	.837	.839					
.800	-.095	-.106	-.060	-.066	.842	.847	.827	.828					
.900	-.064	-.048	-.012	-.019	.828	.821	.806	.807					
.950	-.010	.008	.020	I	.803	.796	.790	I					
.980	.043	.050	.044	I	.779	.777	.780	I					

TABLE IX. - Continued

(m) $M_\infty = 0.85$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.027	I			.277	I			0.00	-.067	-.058	.881	.875
0.000	-1.475				1.853				.05	-.044		.868	
.008	-1.241				1.597				.10	-.070	-.064	.881	.878
.015	-1.130	-1.330	-1.334	-1.054	1.503	1.428	1.435	1.446	.15	-.132		.896	
.021	-1.036				1.432				.20	-.107	-.045	.899	.869
.028	-.953				1.373				.25	-.109	-.022	.900	.858
.034	-.897	-.849	-.849	-.862	1.335	1.304	1.303	1.313	.30	-.139	-.001	.915	.848
.042	-.689				1.206				.35	-.157	-.021	.923	.858
.051	-.342				1.016				.40	-.148	-.010	.918	.853
.068	-.128	-.141	-.137	-.121	.939	.916	.913	.907	.45	-.127	-.012	.909	.854
.085	-.123				.907				.50	-.095	-.013	.893	.855
.102	-.143				.917				.55	-.006		.850	
.136	-.168	-.155	-.145	-.139	.929	.923	.917	.917	.60	-.010	-.023	.851	.860
.169	-.154	-.168	-.132	-.108	.922	.929	.911	.901	.65	.027		.834	
.258	-.137	-.131	-.108	-.103	.914	.911	.899	.899	.70	.037	I	.830	I
.300	-.109	-.090	-.070	-.071	.901	.890	.881	.883	.75	.038		.829	
.400	-.085	-.073	-.073	-.072	.888	.882	.882	.884	.80	.029	-.002	.833	.849
.500	-.119	-.123	-.116	-.120	.905	.907	.903	.907	.85	.015		.840	
.600	-.125	-.128	-.138	-.133	.908	.910	.915	.913	.90	.014		.841	
.700	-.101	-.106	-.126	-.143	.896	.900	.909	.919					
.800	-.070	-.080	-.103	-.119	.881	.888	.897	.907					
.900	-.012	-.023	-.044	-.059	.853	.860	.868	.878					
.950	.045	.037	.004	I	.825	.831	.845	I					
.980	.093	.081	.043	I	.802	.809	.826	I					

(n) $M_\infty = 0.90$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.098	I			.243	I			0.00	-.061	-.073	.930	.937
0.000	-1.358				1.949				.05	-.040		.919	
.008	-1.198				1.736				.10	-.078	-.076	.938	.938
.015	-1.128	-.889	-.759	-.754	1.658	1.444	1.347	1.343	.15	-.120		.960	
.021	-1.061				1.590				.20	-.131	-.061	.966	.930
.028	-.982				1.519				.25	-.148	-.040	.975	.919
.034	-.933	-.768	-.651	-.613	1.478	1.353	1.272	1.248	.30	-.177	-.009	.990	.903
.042	-.888				1.441				.35	-.198	-.033	1.022	.915
.051	-.835				1.400				.40	-.188	-.030	.996	.914
.068	-.772	-.560	-.347	-.311	1.353	1.213	1.085	1.066	.45	-.166	-.030	.985	.914
.085	-.696				1.300				.50	-.126	-.026	.963	.912
.102	-.480				1.163				.55	-.020		.907	
.136	-.087	-.137	-.151	-.146	.943	.970	.977	.975	.60	-.019	-.028	.907	.913
.169	-.056	-.138	-.129	-.103	.926	.971	.965	.953	.65	.028		.882	
.258	-.112	-.130	-.111	-.109	.956	.966	.956	.956	.70	.035	I	.880	I
.300	-.093	-.089	-.072	-.075	.947	.945	.935	.938	.75	.031		.882	
.400	-.080	-.077	-.076	-.078	.940	.939	.937	.939	.80	.015	.001	.890	.898
.500	-.124	-.137	-.134	-.138	.963	.971	.967	.971	.85	.034		.896	
.600	-.130	-.145	-.165	-.157	.966	.975	.984	.981	.90	.013		.891	
.700	-.099	-.126	-.153	-.172	.950	.965	.978	.989					
.800	-.057	-.099	-.125	-.143	.928	.950	.963	.974					
.900	.011	-.027	-.064	-.072	.892	.913	.931	.937					
.950	.068	.041	-.006	I	.862	.877	.900	I					
.980	.111	.091	.042	I	.841	.851	.876	I					

TABLE IX. - Continued

(o) $M_\infty = 0.90$, $\alpha = -0.1^\circ$, $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.054	I			.285	I			0.00	-.071	-.080	.935	.940
0.000	-1.300				1.863				.05	-.047		.923	
.008	-1.075				1.637				.10	-.082	-.071	.941	.935
.015	-.975	-.894	-.880	-.911	1.516	1.449	1.436	1.463	.15	-.111		.956	
.021	-.902				1.455				.20	-.117	-.039	.960	.919
.028	-.837				1.404				.25	-.139	-.019	.972	.908
.034	-.795	-.770	-.783	-.766	1.374	1.354	1.364	1.352	.30	-.152	.029	.978	.894
.042	-.740				1.333				.35	-.170	-.013	.989	.905
.051	-.693				1.301				.40	-.162	-.036	.984	.902
.068	-.624	-.593	-.576	-.562	1.254	1.235	1.223	1.215	.45	-.137	-.011	.970	.905
.085	-.524				1.191				.50	-.131	-.013	.951	.905
.102	-.322				1.072				.55	.001		.898	
.136	-.086	-.395	-.387	-.076	.943	.948	.943	.938	.60	-.004	-.026	.900	.912
.169	-.098	-.117	-.092	-.066	.950	.960	.946	.933	.65	.034		.881	
.258	-.132	-.125	-.102	-.098	.968	.964	.952	.950	.70	.043	I	.876	I
.300	-.102	-.081	-.062	-.069	.952	.941	.931	.934	.75	.041		.877	
.400	-.082	-.070	-.070	-.071	.941	.935	.935	.935	.80	.026	.003	.884	.896
.500	-.130	-.131	-.128	-.129	.967	.967	.966	.966	.85	.012		.892	
.630	-.140	-.137	-.152	-.146	.972	.971	.978	.975	.90	.012		.892	
.700	-.112	-.117	-.141	-.161	.957	.960	.972	.983					
.803	-.074	-.090	-.106	-.132	.937	.946	.954	.967					
.900	-.010	-.022	-.044	-.051	.904	.910	.921	.924					
.950	.057	.043	.009	I	.868	.876	.894	I					
.980	.106	.091	.053	I	.843	.851	.870	I					

(p) $M_\infty = 0.90$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.010	I			.322	I			0.00	-.071	-.080	.935	.940
0.000	-1.191				1.726				.05	-.048		.923	
.008	-.914				1.464				.10	-.079	-.058	.940	.929
.015	-.778	-.899	-.993	-1.043	1.360	1.452	1.530	1.575	.15	-.103		.952	
.021	-.701				1.306				.20	-.113	-.021	.957	.909
.028	-.653				1.273				.25	-.112	-.030	.957	.898
.034	-.614	-.771	-.878	-.912	1.248	1.355	1.435	1.459	.30	-.134	.021	.969	.886
.042	-.531				1.196				.35	-.144	.035	.974	.894
.051	-.502				1.178				.40	-.130	.006	.967	.894
.068	-.413	-.579	-.692	-.716	1.124	1.226	1.300	1.314	.45	-.106	.002	.954	.896
.085	-.243				1.028				.50	-.068	.002	.934	.896
.102	-.151				.978				.55	.017		.889	
.136	-.157	-.119	-.074	-.052	.981	.961	.937	.924	.60	.010	-.020	.893	.908
.169	-.144	-.137	-.066	-.029	.974	.971	.933	.912	.65	.043		.876	
.258	-.141	-.125	-.091	-.082	.973	.964	.946	.940	.70	.049	I	.873	I
.300	-.106	-.080	-.058	-.060	.954	.940	.929	.929	.75	.048		.873	
.400	-.079	-.069	-.067	-.067	.939	.935	.933	.932	.80	.033	.006	.881	.894
.500	-.131	-.130	-.118	-.114	.967	.966	.960	.957	.85	.018		.889	
.600	-.148	-.138	-.138	-.131	.976	.969	.972	.966	.90	.012		.892	
.700	-.124	-.119	-.123	-.145	.964	.959	.963	.974					
.800	-.089	-.090	-.093	-.112	.945	.944	.947	.957					
.900	-.026	-.019	-.027	-.035	.912	.907	.912	.917					
.950	.042	.044	.023	I	.876	.874	.887	I					
.980	.096	.092	.063	I	.848	.850	.866	I					

TABLE IX. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.961	I			.361	I			0.00	-.065	-.078	.935	.939
0.000	-1.007				1.549				.05	-.047		.925	
.008	-.652				1.276				.10	-.078	-.050	.940	.924
.015	-.518	-.891	-1.085	-1.158	1.190	1.446	1.623	1.692	.15	-.101		.952	
.021	-.378				1.105				.20	-.101	-.013	.951	.905
.028	-.262				1.038				.25	-.100	.011	.950	.892
.034	-.199	-.752	-.978	-1.010	1.004	1.342	1.523	1.547	.30	-.115	.033	.958	.881
.042	-.141				.972				.35	-.119	.018	.961	.889
.051	-.264				1.039				.40	-.106	.020	.954	.888
.068	-.274	-.462	-.782	-.823	1.045	1.153	1.366	1.395	.45	-.081	.014	.941	.891
.085	-.214				1.012				.50	-.045	.007	.922	.894
.102	-.200				1.005				.55	.031		.882	
.136	-.204	-.212	-.117	-.076	1.007	1.011	.960	.938	.60	.021	-.016	.888	.907
.169	-.156	-.175	-.065	-.014	.981	.991	.932	.905	.65	.049		.873	
.258	-.140	-.134	-.082	-.061	.972	.969	.941	.930	.70	.052	I	.871	I
.300	-.103	-.091	-.051	-.049	.953	.946	.925	.924	.75	.049		.873	
.400	-.074	-.077	-.062	-.062	.937	.939	.931	.931	.80	.036	.002	.880	.897
.500	-.128	-.137	-.111	-.107	.966	.970	.957	.954	.85	.016		.890	
.600	-.154	-.144	-.128	-.118	.979	.974	.966	.960	.90	.013		.891	
.700	-.132	-.122	-.110	-.124	.968	.963	.956	.964					
.800	-.101	-.092	-.079	-.090	.951	.946	.939	.946					
.900	-.044	-.023	-.014	-.016	.921	.910	.906	.906					
.950	.022	.042	.033	I	.887	.877	.881	I					
.980	.085	.088	.070	I	.854	.853	.862	I					

(r) $M_\infty = 0.90$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.788	I			.477	I			0.00	-.027	-.040	.914	.921
0.000	.140				.827				.05	.002		.899	
.008	.065				.866				.10	-.004	-.021	.902	.910
.015	.070	-.854	-.972	-.714	.864	1.418	1.518	1.315	.15	-.034		.918	
.021	.031				.884				.20	-.047	.017	.925	.891
.028	.006				.884				.25	-.047	.037	.924	.879
.034	-.025	-.477	-.787	-.736	.897				.30	-.062	.055	.931	.870
.042	-.013				.905	1.165	1.370	1.330	.35	-.064	.043	.933	.876
.051	-.064				.932				.40	-.053	.038	.926	.878
.068	-.079	-.413	-.669	-.745	.940	1.126	1.287	1.337	.45	-.032	.030	.915	.881
.085	-.393				.947				.50	-.005	.023	.901	.884
.102	-.106				.954				.55	.055		.870	
.136	-.145	-.315	-.503	-.588	.976	1.070	1.179	1.228	.60	.043	-.007	.876	.900
.169	-.138	-.399	-.411	-.451	.972	1.119	1.126	1.144	.65	.061		.867	
.258	-.151	-.225	-.177	-.157	.978	1.020	.994	.979	.70	.054	I	.870	I
.300	-.109	-.158	-.089	-.081	.956	.984	.945	.938	.75	.049		.873	
.400	-.365	-.124	-.051	-.034	.933	.964	.926	.916	.80	.040	.010	.879	.892
.500	-.115	-.166	-.085	-.075	.960	.986	.943	.938	.85	.028		.885	
.600	-.141	-.168	-.105	-.096	.974	.987	.953	.948	.90	.016		.892	
.700	-.133	-.145	-.093	-.098	.970	.975	.947	.949					
.800	-.111	-.111	-.069	-.069	.958	.955	.935	.935					
.900	-.067	-.038	-.009	-.016	.935	.916	.903	.907					
.950	-.031	.027	.030	I	.900	.882	.883	I					
.980	.062	.072	.056	I	.866	.859	.869	I					

TABLE IX. - Continued

(s) $M_\infty = 0.92$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.366	I			.286	I			0.00	-.056	-.081	.948	.960
0.000	-1.233				1.860				.05	-.038		.938	
.038	-1.021				1.613				.10	-.079	-.067	.960	.952
.015	-.920	-.840	-.828	-.855	1.517	1.446	1.439	1.459	.15	-.113		.978	
.021	-.836				1.445				.20	-.121	-.037	.983	.936
.028	-.787				1.407				.25	-.122	-.012	.984	.923
.034	-.753	-.734	-.745	-.732	1.381	1.364	1.375	1.362	.30	-.154	.019	1.002	.906
.042	-.694				1.338				.35	-.170	-.003	1.011	.918
.051	-.653				1.308				.40	-.161	-.003	1.004	.918
.068	-.602	-.569	-.556	-.545	1.271	1.249	1.242	1.233	.45	-.131	-.007	.987	.920
.085	-.536				1.228				.50	-.088	-.006	.964	.919
.102	-.464				1.182				.55	.003		.915	
.136	-.279	-.243	-.250	-.191	1.071	1.050	1.055	1.021	.60	.002	-.022	.915	.928
.169	-.102	-.096	-.069	-.037	.971	.968	.955	.936	.65	.044		.892	
.258	-.137	-.105	-.081	-.079	.974	.973	.961	.958	.70	.050	I	.889	I
.300	-.086	-.070	-.050	-.054	.963	.953	.945	.945	.75	.049		.890	
.400	-.073	-.065	-.063	-.065	.955	.951	.951	.951	.80	.032	.013	.899	.909
.500	-.134	-.135	-.129	-.132	.989	.989	.986	.988	.85	.018		.907	
.600	-.148	-.144	-.155	-.151	.997	.994	1.001	.999	.90	.015		.908	
.700	-.116	-.124	-.138	-.163	.979	.983	.992	1.005					
.800	-.076	-.093	-.112	-.131	.957	.967	.977	.987					
.900	-.005	-.017	-.045	-.052	.919	.926	.940	.944					
.950	.061	.047	.013	I	.883	.891	.909	I					
.980	.112	.099	.059	I	.857	.864	.885	I					

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.119	I			.249	I			0.00	-.034	-.079	.958	.978
0.000	-1.235				1.969				.05	-.016		.948	
.008	-1.080				1.748				.10	-.063	-.066	.973	.971
.015	-1.005	-.789	-.662	-.663	1.656	1.445	1.355	1.346	.15	-.112		.999	
.021	-.940				1.585				.20	-.131	-.044	1.010	.959
.028	-.880				1.528				.25	-.152	-.019	1.021	.945
.034	-.841	-.686	-.572	-.540	1.493	1.364	1.289	1.259	.30	-.185	.013	1.040	.927
.042	-.790				1.450				.35	-.203	-.016	1.051	.943
.051	-.744				1.413				.40	-.185	-.013	1.041	.943
.068	-.696	-.526	-.408	-.376	1.376	1.249	1.177	1.154	.45	-.151	-.012	1.021	.942
.085	-.636				1.331				.50	-.109	-.008	.996	.941
.102	-.573				1.282				.55	.001		.934	
.136	-.502	-.378	-.326	-.320	1.234	1.154	1.124	1.120	.60	.006	-.013	.931	.943
.169	-.359	-.350	-.278	-.255	1.142	1.136	1.095	1.081	.65	.051		.907	
.258	-.356	-.393	-.110	-.114	.965	.986	.997	.999	.70	.056	I	.904	I
.300	-.025	-.048	-.047	-.053	.948	.961	.962	.965	.75	.048		.908	
.400	-.345	-.353	-.353	-.356	.959	.964	.966	.969	.80	.029	.026	.919	.924
.500	-.122	-.140	-.131	-.135	1.003	1.012	1.010	1.015	.85	.018		.924	
.600	-.145	-.167	-.174	-.174	1.015	1.028	1.035	1.038	.90	.023		.922	
.700	-.110	-.145	-.166	-.201	.996	1.017	1.028	1.054					
.800	-.057	-.132	-.129	-.151	.966	.993	1.007	1.028					
.900	.019	-.018	-.058	-.063	.924	.946	.966	.978					
.950	.081	.054	.032	I	.890	.906	.934	I					
.980	.126	.105	.055	I	.866	.879	.905	I					

TABLE IX. - Continued

(u) $M_\infty = 0.94$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.080	I			.289	I			0.00	-.027	-.092	.955	.991
0.000	-1.166				1.865				.05	-.016		.949	
.008	-.962				1.618				.10	-.065	-.066	.976	.976
.015	-.861	-.783	-.768	-.798	1.520	1.453	1.443	1.464	.15	-.109		1.001	
.021	-.784				1.453				.20	-.122	-.029	1.008	.956
.028	-.734				1.412				.25	-.125	-.035	1.010	.942
.034	-.701	-.686	-.689	-.680	1.386	1.373	1.377	1.369	.30	-.170	.024	1.035	.927
.042	-.648				1.343				.35	-.182	.005	1.042	.937
.051	-.609				1.316				.40	-.162	.004	1.030	.937
.068	-.557	-.535	-.516	-.515	1.278	1.263	1.251	1.250	.45	-.126	-.000	1.010	.940
.085	-.498				1.238				.50	-.090	-.003	.986	.941
.102	-.447				1.200				.55	.012		.930	
.136	-.404	-.385	-.391	-.392	1.173	1.164	1.170	1.170	.60	.013	-.017	.932	.949
.169	-.320	-.375	-.323	-.323	1.124	1.159	1.127	1.127	.65	.054		.909	
.258	-.111	-.096	-.060	-.063	1.001	.993	.973	.974	.70	.060	I	.906	I
.300	-.038	-.027	-.022	-.021	.960	.955	.951	.952	.75	.053		.910	
.400	-.048	-.038	-.041	-.043	.965	.960	.962	.964	.80	.038	.021	.918	.929
.503	-.127	-.128	-.122	-.125	1.011	1.012	1.007	1.010	.85	.019		.928	
.600	-.159	-.156	-.162	-.160	1.028	1.028	1.031	1.030	.90	.014		.931	
.703	-.128	-.134	-.154	-.172	1.011	1.015	1.023	1.037					
.800	-.076	-.094	-.113	-.134	.982	.992	1.000	1.016					
.900	.000	-.013	-.039	-.045	.939	.947	.960	.965					
.950	.070	.058	.020	I	.901	.908	.928	I					
.980	.121	.109	.069	I	.873	.881	.901	I					

(v) $M_\infty = 0.94$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.038	I			.326	I			0.00	-.014	-.090	.948	.990
0.030	-1.062				1.727				.05	-.008		.944	
.008	-.804				1.469				.10	-.056	-.055	.972	.972
.015	-.688	-.780	-.873	-.909	1.376	1.448	1.531	1.565	.15	-.098		.995	
.021	-.602				1.312				.20	-.112	-.010	1.032	.945
.028	-.559				1.281				.25	-.115	.013	1.004	.933
.034	-.531	-.678	-.786	-.798	1.261	1.368	1.454	1.464	.30	-.144	.038	1.021	.919
.042	-.470				1.221				.35	-.152	.022	1.025	.928
.051	-.450				1.207				.40	-.132	.022	1.014	.928
.068	-.399	-.531	-.614	-.638	1.174	1.262	1.320	1.338	.45	-.100	.014	.996	.932
.085	-.360				1.150				.50	-.057	.009	.972	.935
.102	-.320				1.125				.55	.031		.923	
.136	-.320	-.378	-.450	-.468	1.125	1.161	1.208	1.219	.60	.026	-.014	.926	.947
.169	-.270	-.385	-.365	-.353	1.095	1.165	1.153	1.146	.65	.062		.906	
.258	-.249	-.146	-.048	-.034	1.082	1.022	.967	.959	.70	.065	I	.904	I
.300	-.079	-.028	-.003	-.004	.984	.955	.942	.942	.75	.062		.906	
.400	-.042	-.035	-.030	-.030	.963	.959	.956	.956	.80	.047	.024	.914	.927
.500	-.127	-.126	-.113	-.113	1.012	1.011	1.003	1.003	.85	.027		.925	
.600	-.166	-.154	-.154	-.146	1.034	1.027	1.027	1.022	.90	.018		.930	
.703	-.140	-.131	-.137	-.152	1.019	1.014	1.017	1.025					
.800	-.092	-.091	-.096	-.112	.992	.990	.994	1.002					
.900	-.020	-.012	-.023	-.026	.951	.946	.953	.954					
.950	.055	.057	.034	I	.909	.908	.921	I					
.980	.114	.107	.079	I	.878	.881	.897	I					

TABLE IX. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.985	I			.368	I			0.00	-.008	-.084	.947	.987
0.000	-.892				1.554				.05	-.001		.942	
.008	-.572				1.294				.10	-.048	-.044	.969	.964
.015	-.448	-.771	-.960	-1.021	1.209	1.442	1.621	1.688	.15	-.088		.991	
.021	-.360				1.152				.20	-.100	.001	.998	.939
.028	-.313				1.124				.25	-.101	.027	.999	.927
.034	-.282	-.664	-.865	-.898	1.105	1.357	1.528	1.558	.30	-.120	.044	1.010	.918
.042	-.173				1.040				.35	-.124	.035	1.012	.922
.051	-.214				1.064				.40	-.105	.032	.999	.922
.068	-.229	-.481	-.697	-.743	1.071	1.228	1.387	1.419	.45	-.077	.020	.983	.929
.085	-.241				1.077				.50	-.034	.013	.959	.933
.102	-.228				1.070				.55	.045		.915	
.136	-.259	-.361	-.474	-.539	1.088	1.151	1.226	1.268	.60	.036	-.014	.920	.947
.169	-.229	-.410	-.394	-.394	1.071	1.182	1.174	1.171	.65	.066		.903	
.258	-.302	-.277	-.184	-.038	1.114	1.399	.989	.961	.70	.064	I	.904	I
.300	-.208	-.071	.000	.004	1.058	.979	.942	.938	.75	.059		.907	
.400	-.030	-.037	-.023	-.016	.956	.962	.955	.949	.80	.046	.023	.914	.927
.500	-.116	-.127	-.103	-.096	1.004	1.014	.998	.994	.85	.030		.923	
.600	-.164	-.156	-.142	-.125	1.032	1.029	1.020	1.010	.90	.018		.930	
.700	-.152	-.134	-.122	-.135	1.025	1.015	1.008	1.016					
.800	-.106	-.096	-.082	-.091	.999	.994	.985	.991					
.900	-.039	-.016	-.006	-.008	.961	.949	.944	.945					
.950	.037	.054	.045	I	.919	.910	.915	I					
.980	.103	.104	.083	I	.885	.883	.894	I					

(x) $M_\infty = 0.94$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.813	I			.486	I			0.00	.016	-.056	.931	.967
0.000	.174				.845				.05	.029		.924	
.008	.099				.885				.10	-.013	-.019	.947	.947
.015	.108	-.763	-1.119	-1.243	.880	1.425	1.798	1.960	.15	-.048		.966	
.021	.067				.903				.20	-.058	.030	.968	.919
.028	.034				.918				.25	-.057	.052	.968	.908
.034	.003	-.449	-1.027	-1.100	.935	1.201	1.686	1.762	.30	-.070	.062	.975	.902
.042	.018				.926				.35	-.067	.053	.973	.908
.051	-.052				.964				.40	-.047	.047	.962	.910
.068	-.061	-.439	-.840	-.916	.970	1.195	1.500	1.563	.45	-.025	.036	.950	.916
.085	-.082				.982				.50	.011	.031	.930	.919
.102	-.100				.991				.55	.078		.893	
.136	-.167	-.415	-.576	-.618	1.030	1.180	1.293	1.317	.60	.059	-.003	.904	.938
.169	-.149	-.502	-.528	-.490	1.020	1.236	1.254	1.229	.65	.081		.892	
.258	-.263	-.475	-.131	-.084	1.086	1.218	1.009	.983	.70	.072	I	.897	I
.300	-.272	-.292	-.035	-.016	1.091	1.103	.955	.945	.75	.064		.901	
.400	-.074	-.065	-.013	.004	.977	.972	.943	.937	.80	.053	.028	.907	.923
.500	-.088	-.150	-.082	-.072	.985	1.020	.982	.979	.85	.037		.916	
.600	-.144	-.180	-.119	-.101	1.017	1.037	1.003	.995	.90	.026		.922	
.700	-.149	-.159	-.103	-.105	1.020	1.026	.993	.998					
.800	-.120	-.118	-.069	-.070	1.003	1.002	.974	.978					
.900	-.067	-.030	-.001	.005	.974	.953	.937	.936					
.950	.009	.040	.042	I	.931	.914	.913	I					
.980	.078	.088	.072	I	.894	.888	.897	I					

TABLE IX. - Continued

(y) $M_\infty = 0.96$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.092				.291				0.00	-.097	-.102	1.011	1.016
0.000	-1.117				1.858				.05	-.016		.964	
.008	-.916				1.614				.10	-.044	-.253	.981	.988
.015	-.816	-.735	-.732	-.755	1.517	1.454	1.443	1.466	.15	-.084		1.005	
.021	-.737				1.450				.20	-.100	-.018	1.015	.968
.028	-.688				1.410				.25	-.127	.007	1.031	.954
.034	-.658	-.640	-.651	-.638	1.385	1.376	1.377	1.371	.30	-.165	.054	1.053	.927
.042	-.604				1.344				.35	-.194	.013	1.070	.950
.051	-.562				1.313				.40	-.174	.012	1.059	.951
.068	-.517	-.496	-.483	-.490	1.280	1.269	1.254	1.261	.45	-.121	.009	1.027	.953
.085	-.469				1.247				.50	-.073	.002	1.032	.956
.102	-.410				1.210				.55	.026		.945	
.136	-.377	-.362	-.371	-.378	1.188	1.178	1.180	1.185	.60	.028	-.016	.944	.967
.169	-.310	-.355	-.325	-.319	1.145	1.171	1.151	1.147	.65	.068		.922	
.258	-.311	-.307	-.262	-.247	1.145	1.140	1.112	1.133	.70	.070		.920	
.300	-.286	-.234	-.191	-.195	1.129	1.095	1.069	1.071	.75	.063		.924	
.400	-.055	-.032	-.050	-.071	.991	.976	.986	1.000	.80	.047	.032	.934	.942
.500	-.087	-.096	-.097	-.101	1.010	1.013	1.013	1.017	.85	.026		.945	
.600	-.141	-.139	-.144	-.138	1.042	1.038	1.041	1.039	.90	.019		.948	
.700	-.138	-.146	-.154	-.177	1.039	1.042	1.049	1.063					
.800	-.073	-.088	-.112	-.131	.999	1.008	1.024	1.036					
.900	.010	-.004	-.026	-.033	.952	.960	.975	.978					
.950	.083	.067	.035		.911	.920	.940						
.980	.133	.120	.083		.883	.890	.913						

(z) $M_\infty = 0.98$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.65$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.136				.259				0.00	-.160	-.154	1.074	1.071
0.000	-1.128				1.976				.05	-.140		1.061	
.008	-.970				1.742				.10	-.138	-.224	1.060	1.113
.015	-.886	-.683	-.571	-.564	1.643	1.446	1.355	1.346	.15	-.166		1.077	
.021	-.820				1.574				.20	-.183	.012	1.088	.971
.028	-.770				1.526				.25	-.210	.022	1.104	.965
.034	-.735	-.585	-.475	-.462	1.493	1.366	1.282	1.270	.30	-.249	.096	1.129	.921
.042	-.688				1.451				.35	-.300	.020	1.162	.964
.051	-.651				1.419				.40	-.326	.014	1.179	.968
.068	-.612	-.440	-.342	-.322	1.388	1.259	1.190	1.174	.45	-.335	.012	1.186	.969
.085	-.552				1.340				.50	-.106	.014	1.041	.968
.102	-.489				1.293				.55	.044		.952	
.136	-.439	-.326	-.277	-.278	1.257	1.180	1.147	1.146	.60	.049	-.001	.950	.976
.169	-.349	-.312	-.264	-.246	1.195	1.172	1.139	1.125	.65	.085		.929	
.258	-.282	-.295	-.247	-.237	1.150	1.159	1.128	1.119	.70	.087		.927	
.300	-.248	-.255	-.215	-.215	1.128	1.133	1.108	1.106	.75	.075		.934	
.400	-.123	-.139	-.161	-.173	1.051	1.061	1.074	1.080	.80	.052	.051	.948	.947
.500	-.159	-.189	-.193	-.192	1.073	1.090	1.092	1.091	.85	.038		.957	
.600	-.201	-.214	-.228	-.221	1.100	1.105	1.116	1.109	.90	.043		.954	
.700	-.212	-.233	-.245	-.263	1.107	1.116	1.127	1.136					
.800	-.192	-.241	-.274	-.291	1.095	1.122	1.145	1.154					
.900	.042	.012	-.015	-.018	.953	.969	.987	.987					
.950	.124	.099	.050		.907	.919	.949						
.980	.163	.144	.103		.887	.894	.919						

TABLE IX. - Continued

(aa) $M_\infty = 0.98$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.65$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.135	I			.291	I			0.00	-.158	-.170	1.071	1.078
0.000	-1.070				1.878				.05	-.128		1.053	
.008	-.860				1.614				.10	-.128	-.136	1.054	1.058
.015	-.759	-.686	-.677	-.702	1.515	1.449	1.440	1.460	.15	-.153		1.069	
.021	-.684				1.447				.20	-.174	.016	1.081	.968
.028	-.642				1.411				.25	-.200	.041	1.098	.953
.034	-.615	-.598	-.591	-.593	1.390	1.376	1.369	1.370	.30	-.236	.108	1.121	.914
.042	-.559				1.345				.35	-.279	.042	1.148	.953
.051	-.531				1.324				.40	-.301	.037	1.165	.956
.068	-.483	-.459	-.447	-.444	1.291	1.269	1.262	1.259	.45	-.299	.031	1.165	.959
.085	-.429				1.253				.50	-.068	.023	1.021	.964
.102	-.384				1.222				.55	.055		.946	
.136	-.351	-.336	-.338	-.343	1.196	1.184	1.187	1.190	.60	.058	-.000	.944	.978
.169	-.291	-.328	-.297	-.295	1.156	1.179	1.159	1.158	.65	.091		.926	
.258	-.295	-.290	-.243	-.229	1.159	1.154	1.125	1.116	.70	.093	I	.925	I
.300	-.275	-.240	-.193	-.193	1.146	1.123	1.094	1.093	.75	.084		.929	
.400	-.152	-.130	-.134	-.138	1.068	1.053	1.057	1.060	.80	.063	.051	.941	.948
.500	-.168	-.181	-.172	-.176	1.078	1.085	1.083	1.083	.85	.039		.954	
.600	-.208	-.205	-.213	-.213	1.102	1.101	1.110	1.107	.90	.035		.956	
.700	-.223	-.224	-.232	-.253	1.111	1.112	1.122	1.132					
.800	-.198	-.238	-.254	-.286	1.095	1.122	1.132	1.154					
.900	.049	.017	.003	-.068	.949	.968	.976	1.019					
.950	.116	.102	.069	I	.911	.919	.938	I					
.980	.156	.144	.113	I	.887	.895	.913	I					

(bb) $M_\infty = 0.98$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.64$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.064	I			.328	I			0.00	-.134	-.163	1.053	1.076
0.000	-.970				1.729				.05	-.090		1.027	
.008	-.715				1.466				.10	-.134	-.144	1.035	1.061
.015	-.612	-.689	-.788	-.811	1.379	1.447	1.533	1.562	.15	-.141		1.057	
.021	-.534				1.320				.20	-.157	.046	1.067	.950
.028	-.491				1.287				.25	-.169	.070	1.077	.936
.034	-.464	-.594	-.698	-.707	1.271	1.373	1.451	1.466	.30	-.211	.122	1.101	.907
.042	-.398				1.223				.35	-.243	.074	1.123	.935
.051	-.388				1.218				.40	-.252	.067	1.128	.941
.068	-.343	-.453	-.548	-.562	1.187	1.268	1.329	1.350	.45	-.110	.054	1.041	.949
.085	-.307				1.164				.50	-.004	.040	.978	.957
.102	-.276				1.144				.55	.079		.930	
.136	-.275	-.327	-.404	-.415	1.143	1.181	1.226	1.244	.60	.079	.012	.930	.971
.169	-.242	-.330	-.342	-.346	1.121	1.182	1.184	1.196	.65	.110		.912	
.258	-.291	-.307	-.244	-.217	1.153	1.164	1.124	1.109	.70	.107	I	.914	I
.300	-.286	-.253	-.178	-.165	1.150	1.129	1.081	1.074	.75	.104		.916	
.400	-.191	-.126	-.115	-.116	1.090	1.051	1.043	1.044	.80	.086	.063	.928	.940
.500	-.179	-.182	-.165	-.162	1.085	1.085	1.074	1.072	.85	.067		.940	
.600	-.214	-.207	-.209	-.205	1.108	1.102	1.101	1.099	.90	.053		.949	
.700	-.228	-.221	-.226	-.241	1.118	1.113	1.112	1.122					
.800	-.221	-.201	-.221	-.235	1.112	1.102	1.109	1.118					
.900	.029	.038	.017	.000	.959	.958	.965	.976					
.950	.107	.100	.081	I	.914	.921	.929	I					
.980	.155	.145	.119	I	.888	.893	.908	I					

TABLE IX. - Concluded

(cc) $M_\infty = 0.98$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.65$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	1.009	I			.372	I			0.00	-.128	-.178	1.051	1.082
0.000	-.809				1.556				.05	-.087		1.028	
.008	-.492				1.293				.10	-.102	.004	1.036	.974
.015	-.363	-.683	-.876	-.915	1.201	1.446	1.625	1.669	.15	-.131		1.053	
.021	-.301				1.159				.20	-.154	.053	1.067	.946
.028	-.255				1.130				.25	-.154	.074	1.067	.933
.034	-.241	-.586	-.780	-.808	1.121	1.366	1.531	1.560	.30	-.201	.120	1.096	.907
.042	-.150				1.065				.35	-.231	.083	1.115	.929
.051	-.192				1.090				.40	-.247	.073	1.127	.936
.068	-.171	-.423	-.625	-.656	1.080	1.243	1.394	1.423	.45	-.136	.060	1.059	.943
.085	-.183				1.088				.50	-.014	.047	.987	.949
.102	-.179				1.086				.55	.084		.930	
.136	-.216	-.311	-.436	-.486	1.108	1.168	1.251	1.289	.60	.083	.013	.930	.969
.169	-.199	-.356	-.365	-.382	1.097	1.196	1.202	1.214	.65	.112		.914	
.258	-.276	-.345	-.259	-.198	1.146	1.189	1.132	1.095	.70	.112	I	.913	I
.300	-.280	-.307	-.171	-.142	1.149	1.164	1.077	1.060	.75	.104		.918	
.400	-.212	-.140	-.109	-.102	1.106	1.059	1.040	1.036	.80	.085	.060	.929	.941
.500	-.194	-.196	-.158	-.151	1.094	1.093	1.072	1.066	.85	.062		.942	
.600	-.217	-.216	-.199	-.196	1.109	1.107	1.098	1.093	.90	.048		.949	
.700	-.235	-.230	-.218	-.230	1.118	1.117	1.110	1.115					
.800	-.238	-.234	-.225	-.213	1.120	1.119	1.114	1.104					
.900	.021	.333	.019	.016	.964	.957	.967	.967					
.950	.096	.100	.080	I	.921	.919	.932	I					
.980	.148	.140	.117	I	.891	.896	.911	I					

(dd) $M_\infty = 0.98$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.65$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.836	I			.497	I			0.00	-.120	-.177	1.049	1.084
0.000	.231				.847				.05	-.072		1.019	
.008	.154				.889				.10	-.092	-.100	1.031	1.037
.015	.163	-.656	-1.014	-1.093	.883	1.423	1.799	1.922	.15	-.122		1.048	
.021	.118				.909				.20	-.132	.042	1.054	.954
.028	.083				.928				.25	-.132	.076	1.054	.935
.034	.057	-.367	-.926	-.976	.943	1.207	1.685	1.754	.30	-.175	.118	1.081	.911
.042	.070				.936				.35	-.193	.098	1.092	.923
.051	-.013				.984				.40	-.194	.091	1.092	.927
.068	-.015	-.370	-.754	-.811	.985	1.208	1.507	1.568	.45	-.064	.079	1.015	.933
.085	-.032				.996				.50	.015	.067	.969	.940
.102	-.052				1.008				.55	.089		.927	
.136	-.120	-.355	-.516	-.540	1.049	1.198	1.310	1.333	.60	.073	.030	.935	.962
.169	-.116	-.420	-.472	-.470	1.046	1.243	1.278	1.281	.65	.117		.912	
.258	-.217	-.428	-.355	-.221	1.109	1.248	1.196	1.113	.70	.119	I	.910	I
.300	-.231	-.419	-.202	-.135	1.119	1.242	1.097	1.060	.75	.112		.913	
.400	-.195	-.217	-.115	-.092	1.095	1.110	1.044	1.034	.80	.089	.061	.926	.944
.500	-.251	-.237	-.161	-.141	1.130	1.123	1.072	1.063	.85	.068		.939	
.600	-.236	-.263	-.203	-.183	1.120	1.139	1.100	1.088	.90	.056		.946	
.700	-.242	-.271	-.222	-.213	1.125	1.145	1.111	1.109					
.800	-.248	-.273	-.213	-.188	1.128	1.146	1.106	1.091					
.900	-.272	-.040	-.116	-.000	1.144	1.003	.987	.978					
.950	-.095	.035	.040	I	1.034	.959	.956	I					
.980	-.092	.074	.059	I	.926	.937	.945	I					

TABLE X. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS MEASURED ON THE EXTERNAL SURFACES OF THE NACELLE AND PYLON OF CONFIGURATION 6

(a) $M_\infty = 0.40$, $\alpha = -2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.90$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.195	-.009			.357	.412			0.00	-.007	.008	.400	.397
0.000									.05	-.018		.402	
.008	-.054				.409				.10	-.020	-.025	.403	.404
.015	-.126	.033	.121	.137	.424	.392	.373	.369	.15	-.079		.414	
.021	-.151				.428				.20	-.079	-.028	.415	.405
.028	-.171				.433				.25	-.096	-.026	.418	.404
.034	-.205	-.110	-.035	-.022	.439	.421	.406	.403	.30	-.131	.008	.425	.397
.042	-.180				.434				.35	-.134	-.028	.425	.405
.051	-.192				.437				.40	-.129	-.019	.424	.403
.068	-.180	-.119	-.082	-.077	.434	.423	.415	.414	.45	-.118	-.017	.423	.402
.085	-.187				.436				.50	-.078	-.014	.415	.401
.102	-.194				.437				.55				
.136	-.217	-.144	-.114	-.115	.442	.428	.421	.422	.60	.006	-.004	.397	.399
.169	-.199	-.178	-.146	-.143	.438	.434	.428	.427	.65	.030		.392	
.258	-.176	-.161	-.135	-.115	.434	.431	.425	.422	.70	.041	.010	.391	.397
.300	-.114	-.117	-.094	-.083	.422	.422	.417	.416	.75	.041		.390	
.400	-.087	-.093	-.083	-.076	.416	.417	.415	.414	.80	.028	.012	.393	.396
.500	-.095	-.111	-.100	-.115	.419	.421	.419	.421	.85	.020		.395	
.600	-.097	-.110	-.122	-.139	.419	.421	.423	.427	.90	.021		.395	
.700	-.073	-.095	-.124	-.142	.414	.418	.424	.427					
.800	-.050	-.071	-.104	-.129	.409	.413	.420	.425					
.900	-.001	-.029	-.063	-.073	.399	.404	.411	.414					
.950	.036	.015	-.022	-.043	.391	.396	.403	.407					
.980	.077	.055	.032	.016	.383	.388	.392	.396					

(b) $M_\infty = 0.40$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.90$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.040	-.125			.407	.423			0.00	-.021	-.031	.402	.405
0.000									.05	-.057		.410	
.008	.067				.378				.10	-.057	-.049	.410	.409
.015	.009	.017	.026	.027	.397	.395	.393	.393	.15	-.109		.421	
.021	-.051				.409				.20	-.107	-.052	.420	.409
.028	-.098				.418				.25	-.118	-.041	.422	.407
.034	-.129	-.105	-.092	-.093	.424	.420	.417	.417	.30	-.146	.002	.428	.398
.042	-.124				.424				.35	-.149	-.040	.429	.407
.051	-.121				.424				.40	-.136	-.037	.426	.416
.068	-.141	-.118	-.114	-.108	.427	.423	.422	.420	.45	-.137	-.036	.426	.406
.085	-.153				.429				.50	-.091	-.028	.417	.405
.102	-.165				.432				.55				
.136	-.188	-.140	-.130	-.133	.437	.427	.425	.425	.60	-.023	-.033	.403	.404
.169	-.183	-.172	-.159	-.153	.435	.433	.430	.429	.65	.008		.397	
.258	-.172	-.153	-.134	-.124	.433	.429	.425	.423	.70	.015	-.017	.395	.403
.300	-.109	-.113	-.094	-.080	.420	.421	.418	.416	.75	.015		.395	
.400	-.088	-.087	-.079	-.074	.416	.416	.415	.413	.80	.003	-.016	.398	.401
.500	-.101	-.103	-.093	-.108	.419	.419	.417	.421	.85	-.001		.399	
.600	-.103	-.104	-.109	-.126	.420	.419	.420	.424	.90	-.004		.400	
.700	-.080	-.089	-.113	-.125	.415	.416	.422	.424					
.800	-.059	-.066	-.090	-.115	.411	.412	.418	.421					
.900	-.013	-.020	-.050	-.058	.401	.403	.409	.411					
.950	.023	.014	-.012	-.031	.394	.395	.401	.405					
.980	.071	.050	.040	.023	.384	.387	.390	.394					

TABLE X. - Continued

(c) $M_\infty = 0.40$, $\alpha = 2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.90$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	-.440	-.103			.483	.419			0.00	-.022	-.027	.403	.404
0.000	?				?				.05	-.041		.407	
.008	.233				.348				.10	-.041	-.033	.407	.405
.015	.117	.031	-.038	-.062	.374	.393	.406	.411	.15	-.088		.417	
.021	.038				.391				.20	-.088	-.025	.417	.403
.028	-.022				.404				.25	-.092	-.012	.417	.401
.034	-.059	-.107	-.134	-.153	.411	.420	.425	.429	.30	-.114	.024	.421	.394
.042	-.062				.411				.35	-.115	-.038	.422	.420
.051	-.069				.412				.40	-.101	-.006	.420	.400
.069	-.095	-.114	-.140	-.140	.418	.422	.427	.427	.45	-.132	-.007	.419	.400
.085	-.115				.422				.50	-.056	-.006	.410	.400
.102	-.132				.426				.55	?		?	
.136	-.153	-.144	-.146	-.154	.430	.427	.428	.430	.60	-.008	-.012	.400	.401
.169	-.163	-.172	-.172	-.168	.431	.433	.433	.432	.65	.025		.394	
.258	-.162	-.155	-.142	-.125	.431	.430	.427	.426	.70	.013	.001	.392	.398
.300	-.102	-.113	-.096	-.083	.419	.421	.418	.415	.75	.032		.393	
.400	-.085	-.084	-.076	-.067	.416	.416	.414	.412	.80	.032	.033	.392	.398
.500	-.101	-.103	-.088	-.097	.419	.419	.417	.418	.85	.019		.395	
.600	-.106	-.100	-.101	-.114	.421	.419	.419	.422	.90	.016		.395	
.700	-.089	-.089	-.102	-.111	.417	.416	.420	.421					
.800	-.072	-.067	-.079	-.098	.414	.412	.415	.419					
.900	-.025	-.023	-.035	-.043	.404	.402	.406	.407					
.950	.014	.015	.031	-.015	.395	.396	.399	.401					
.980	.067	.057	.045	.029	.385	.387	.389	.392					

(d) $M_\infty = 0.40$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.91$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	-.562	-.102			.505	.419			0.00	-.021	-.031	.403	.405
0.000	?				?				.05	-.045		.408	
.008	.364				.318				.10	-.045	-.028	.428	.404
.015	.216	.039	-.126	-.156	.352	.391	.424	.430	.15	-.081		.415	
.021	.137				.369				.20	-.080	-.016	.415	.402
.028	.069				.384				.25	-.080	.000	.415	.399
.034	.018	-.111	-.192	-.218	.395	.421	.437	.442	.30	-.097	.033	.418	.392
.042	.002				.398				.35	-.096	.004	.418	.398
.051	-.017				.402				.40	-.081	.008	.415	.398
.068	-.050	-.127	-.171	-.176	.409	.424	.433	.434	.45	-.080	.005	.415	.397
.085	-.074				.414				.50	-.035	.005	.405	.398
.102	-.057				.418				.55	?		?	
.136	-.121	-.151	-.166	-.172	.423	.429	.431	.433	.60	.002	-.008	.398	.400
.169	-.139	-.131	-.134	-.183	.427	.435	.435	.435	.65	.031		.393	
.258	-.152	-.146	-.146	-.129	.430	.431	.428	.425	.70	.037	.005	.391	.397
.300	-.094	-.117	-.098	-.081	.418	.422	.418	.415	.75	.037		.391	
.400	-.073	-.092	-.090	-.061	.415	.417	.415	.411	.80	.037	.036	.391	.397
.500	-.100	-.106	-.085	-.086	.419	.420	.416	.416	.85	.021		.394	
.600	-.111	-.107	-.094	-.133	.421	.422	.417	.419	.90	.020		.394	
.700	-.055	-.092	-.094	-.099	.417	.418	.417	.418					
.800	-.079	-.074	-.068	-.082	.415	.413	.412	.415					
.900	-.036	-.030	-.024	-.029	.406	.405	.403	.405					
.950	.007	.010	.006	-.002	.397	.397	.398	.399					
.980	.058	.052	.048	.035	.387	.387	.389	.392					

TABLE X. - Continued

(e) $M_\infty = 0.40$, $\alpha = 8.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.88$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.473	-.248			.489	.447			0.00	-.047	-.040	.409	.407
0.000	I				I				.05	-.050		.409	
.008	.544				.271				.10	-.050	-.033	.409	.426
.015	.387	.021	-.285	-.362	.312	.395	.454	.469	.15	-.052		.410	
.021	.287				.336				.20	-.074	-.007	.414	.407
.028	.208				.354				.25	-.071	.006	.413	.398
.034	.153	-.123	-.332	-.340	.366	.424	.458	.465	.30	-.074	.039	.414	.391
.042	.124				.373				.35	-.073	.014	.413	.396
.051	.093				.379				.40	-.053	.016	.409	.396
.068	.042	-.153	-.237	-.242	.390	.429	.445	.447	.45	-.054	.012	.409	.396
.085	.013				.395				.50	-.006	.009	.400	.396
.102	-.017				.402				.55	I		I	
.136	-.045	-.180	-.209	-.200	.408	.434	.440	.438	.60	.016	-.036	.395	.402
.169	-.089	-.207	-.215	-.204	.416	.439	.441	.439	.65	.039		.390	
.258	-.120	-.193	-.161	-.130	.423	.438	.431	.424	.70	.037	.021	.391	.398
.300	-.068	-.150	-.109	-.078	.412	.429	.421	.414	.75	.038		.391	
.400	-.059	-.123	-.082	-.055	.411	.424	.415	.410	.80	.035	-.001	.392	.399
.500	-.087	-.134	-.082	-.073	.416	.426	.415	.413	.85	.020		.394	
.600	-.105	-.137	-.083	-.083	.420	.426	.415	.415	.90	.013		.396	
.700	-.092	-.121	-.079	-.075	.417	.423	.415	.414					
.800	-.088	-.095	-.054	-.056	.416	.418	.410	.410					
.900	-.052	-.055	-.015	-.013	.410	.409	.401	.401					
.950	-.011	-.015	.014	.008	.401	.402	.396	.397					
.980	.044	.029	.045	.033	.390	.392	.389	.391					

(f) $M_\infty = 0.60$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.92$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.067	-.121			.620	.637			0.00	-.046	-.042	.614	.612
0.000	I				I				.05	-.064		.619	
.008	.119				.560				.10	-.065	-.056	.620	.617
.015	.004	.039	.049	.033	.598	.587	.583	.588	.15	-.117		.636	
.021	-.047				.613				.20	-.128	-.048	.640	.614
.028	-.092				.628				.25	-.130	-.044	.640	.613
.034	-.141	-.116	-.097	-.101	.644	.636	.630	.631	.30	-.153	.003	.647	.598
.042	-.116				.635				.35	-.161	-.035	.650	.610
.051	-.145				.645				.40	-.147	-.033	.646	.609
.068	-.149	-.131	-.121	-.118	.647	.641	.637	.636	.45	-.132	-.034	.642	.610
.085	-.164				.652				.50	-.092	-.031	.629	.608
.102	-.180				.656				.55	I		I	
.136	-.206	-.150	-.139	-.145	.664	.647	.642	.645	.60	-.022	-.035	.609	.609
.169	-.195	-.186	-.173	-.175	.660	.657	.654	.654	.65	.006		.597	
.258	-.135	-.168	-.148	-.132	.657	.652	.646	.640	.70	.016	-.019	.594	.604
.300	-.116	-.115	-.098	-.085	.636	.635	.630	.626	.75	.016		.594	
.400	-.089	-.090	-.084	-.072	.628	.627	.626	.622	.80	-.000	-.015	.599	.604
.500	-.108	-.113	-.100	-.112	.633	.635	.631	.634	.85	-.007		.601	
.600	-.112	-.107	-.120	-.131	.625	.633	.638	.640	.90	-.007		.601	
.700	-.086	-.093	-.121	-.131	.626	.628	.637	.640					
.800	-.065	-.071	-.097	-.120	.619	.622	.630	.637					
.900	-.017	-.025	-.047	-.061	.605	.606	.614	.619					
.950	.033	.017	-.010	-.034	.588	.593	.622	.629					
.980	.078	.067	.042	.049	.573	.577	.586	.583					

TABLE X. - Continued

(g) $M_\infty = 0.70$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.92$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	18J	9J	45	33J	18J	9J	45	33J		LOWER	UPPER	LOWER	UPPER
-.1J	-.J52	-.1J2			.719	.738			0.00	-.053	-.058	.721	.722
0.000	I				I				.05	-.074		.73J	
.008	.143				.646				.10	-.078	-.068	.731	.725
.015	.014	.045	.062	.055	.696	.682	.677	.678	.15	-.123		.748	
.021	-.036				.715				.20	-.147	-.060	.755	.723
.028	-.093				.735				.25	-.146	-.048	.755	.718
.034	-.140	-.120	-.097	-.104	.753	.746	.739	.739	.30	-.172	-.000	.765	.699
.042	-.119				.745				.35	-.180	-.042	.768	.715
.051	-.153				.758				.40	-.162	-.239	.76J	.714
.068	-.154	-.137	-.127	-.125	.758	.752	.750	.747	.45	-.142	-.041	.754	.715
.085	-.172				.766				.50	-.102	-.038	.738	.714
.102	-.190				.772				.55	I		I	
.136	-.215	-.159	-.146	-.152	.781	.760	.757	.757	.60	-.042	-.042	.716	.715
.169	-.212	-.201	-.188	-.183	.780	.776	.771	.769	.65	.005		.699	
.258	-.194	-.178	-.155	-.138	.774	.767	.758	.752	.70	.013	-.026	.694	.709
.300	-.118	-.120	-.104	-.087	.744	.745	.739	.733	.75	.007		.697	
.400	-.091	-.088	-.086	-.075	.734	.733	.733	.728	.80	-.004	-.024	.701	.708
.500	-.112	-.115	-.132	-.111	.742	.743	.738	.741	.85	-.014		.705	
.600	-.116	-.114	-.122	-.133	.744	.743	.746	.750	.90	-.013		.705	
.7J	-.J9J	-.J98	-.124	-.135	.734	.736	.747	.751					
.800	-.069	-.073	-.098	-.122	.726	.727	.737	.746					
.900	-.013	-.024	-.052	-.059	.704	.708	.719	.722					
.950	.038	.022	-.006	-.032	.685	.691	.702	.710					
.980	.089	.076	.050	.063	.665	.670	.680	.674					

(h) $M_\infty = 0.80$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.93$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	18J	9J	45	33J	18J	9J	45	33J		LOWER	UPPER	LOWER	UPPER
-.1J	.27J	-.1J5			.678	.843			0.00	-.017	-.027	.812	.812
0.000	I				I				.05	-.039		.823	
.108	.029				.792				.10	-.061	-.046	.833	.820
.015	-.094	.075	.177	.183	.848	.766	.725	.716	.15	-.105		.852	
.021	-.141				.869				.20	-.126	-.040	.861	.817
.028	-.180				.885				.25	-.135	-.033	.864	.815
.034	-.244	-.120	-.027	-.032	.913	.853	.819	.812	.30	-.170	.018	.978	.790
.042	-.202				.893				.35	-.187	-.031	.887	.812
.051	-.242				.912				.40	-.169	-.031	.878	.812
.068	-.219	-.148	-.092	-.088	.901	.866	.847	.837	.45	-.153	-.028	.871	.812
.085	-.228				.905				.50	-.103	-.019	.848	.809
.102	-.247				.914				.55	I		I	
.136	-.265	-.182	-.137	-.152	.927	.882	.867	.868	.60	-.212	-.015	.805	.807
.169	-.249	-.228	-.188	-.189	.913	.902	.889	.886	.65	.033		.785	
.258	-.214	-.2J	-.166	-.146	.897	.89J	.878	.867	.70	.038	.001	.783	.800
.300	-.130	-.128	-.113	-.093	.858	.857	.852	.843	.75	.029		.786	
.400	-.J96	-.077	-.095	-.079	.843	.844	.845	.837	.80	.007	.005	.796	.799
.500	-.116	-.131	-.117	-.120	.851	.857	.854	.855	.85	.013		.798	
.600	-.119	-.134	-.138	-.155	.853	.859	.864	.870	.90	.003		.799	
.700	-.087	-.117	-.147	-.158	.838	.851	.868	.872					
.800	-.056	-.090	-.115	-.145	.825	.840	.853	.865					
.9J	.J99	-.J26	-.J61	-.J76	.796	.812	.827	.834					
.950	.064	.028	-.015	-.045	.771	.783	.807	.820					
.98J	.137	.J85	.J46	.036	.751	.762	.779	.783					

TABLE X. - Continued

(i) $M_\infty = 0.80$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.93$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.057	-.083			.823	.835			.20	-.243	-.248	.819	.820
0.000	↑				↑				.05	-.056		.823	
.008	.182				.717				.10	-.063	-.053	.826	.822
.015	.043	.080	.082	.074	.779	.762	.762	.765	.15	-.120		.852	
.021	-.022				.808				.20	-.132	-.041	.857	.817
.028	-.082				.834				.25	-.133	-.023	.858	.808
.034	-.147	-.112	-.089	-.091	.864	.849	.838	.839	.30	-.163	.034	.871	.783
.042	-.120				.852				.35	-.175	-.017	.877	.806
.051	-.168				.874				.40	-.153	-.018	.867	.826
.068	-.166	-.143	-.135	-.130	.873	.863	.853	.857	.45	-.133	-.017	.858	.806
.085	-.192				.884				.50	-.090	-.019	.838	.803
.102	-.215				.895				.55	↑		↑	
.136	-.239	-.177	-.158	-.167	.906	.878	.870	.873	.60	-.009	-.024	.802	.800
.169	-.233	-.223	-.205	-.207	.903	.909	.890	.893	.65	.032		.783	
.258	-.215	-.196	-.170	-.152	.894	.886	.875	.867	.70	.037	-.008	.791	.802
.300	-.126	-.127	-.110	-.096	.955	.856	.847	.841	.75	.036		.782	
.400	-.094	-.091	-.091	-.077	.840	.839	.839	.833	.80	.014	-.005	.792	.800
.500	-.116	-.119	-.107	-.119	.850	.852	.846	.852	.85	.007		.795	
.600	-.123	-.120	-.131	-.141	.853	.852	.857	.862	.90	.002		.797	
.700	-.097	-.104	-.135	-.145	.842	.845	.859	.863					
.800	-.071	-.076	-.103	-.129	.831	.833	.844	.856					
.900	-.011	-.023	-.044	-.061	.803	.810	.818	.825					
.950	.045	.028	-.001	-.020	.778	.786	.798	.807					
.980	.100	.035	.058	.041	.753	.760	.772	.780					

(j) $M_\infty = 0.80$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.93$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.330	-.082			.948	.834			.20	-.248	-.249	.819	.820
0.000	↑				↑				.05	-.066		.827	
.008	.327				.649				.10	-.065	-.046	.827	.819
.015	.179	.079	-.009	-.041	.717	.763	.802	.816	.15	-.108		.846	
.021	.092				.756				.20	-.118	-.023	.852	.808
.028	.022				.788				.25	-.118	-.006	.852	.801
.034	-.048	-.115	-.169	-.176	.820	.849	.874	.877	.30	-.138	.044	.860	.778
.042	-.034				.813				.35	-.148	.001	.865	.797
.051	-.083				.840				.40	-.126	.001	.855	.797
.068	-.111	-.144	-.179	-.178	.848	.863	.879	.878	.45	-.108	-.003	.847	.799
.085	-.140				.861				.50	-.059	-.006	.825	.801
.102	-.168				.874				.55	↑		↑	
.136	-.201	-.179	-.181	-.189	.889	.879	.879	.883	.60	.000	-.017	.798	.806
.169	-.211	-.221	-.217	-.221	.894	.898	.896	.898	.65	.041		.779	
.258	-.207	-.197	-.169	-.151	.891	.887	.875	.866	.70	.040	-.005	.780	.800
.300	-.124	-.126	-.109	-.092	.854	.854	.847	.839	.75	.040		.780	
.400	-.091	-.092	-.085	-.072	.839	.839	.836	.830	.80	.020	-.002	.789	.798
.500	-.118	-.119	-.100	-.112	.851	.851	.843	.848	.85	.013		.792	
.600	-.129	-.120	-.118	-.127	.856	.951	.851	.855	.90	.007		.795	
.700	-.106	-.103	-.119	-.128	.846	.844	.852	.856					
.800	-.081	-.076	-.090	-.107	.834	.832	.838	.842					
.900	-.027	-.021	-.033	-.037	.810	.807	.813	.814					
.950	.033	.028	.013	-.002	.783	.785	.792	.799					
.980	.091	.034	.062	.045	.757	.760	.770	.778					

TABLE X. - Continued

(k) $M_\infty = 0.80$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.93$

X/L	CP AT PHI =				MI AT PHI =				X/C	CP		MI	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.578		-.126		1.068		.855		0.00	-.064	-.054	.826	.822
0.000	I				I				.05	-.066		.827	
.008	.451				.591				.10	-.066	-.043	.827	.817
.015	.288	.080	-.110	-.171	.667	.762	.847	.875	.15	-.104		.845	
.021	.189				.713				.20	-.116	-.016	.850	.805
.028	.110				.748				.25	-.111	-.001	.847	.798
.034	.041	-.119	-.241	-.261	.779	.851	.906	.916	.30	-.129	.051	.855	.775
.042	.035				.781				.35	-.130	.009	.856	.794
.051	-.021				.807				.40	-.105	.009	.845	.794
.068	-.055	-.153	-.216	-.225	.822	.867	.895	.900	.45	-.083	.003	.835	.797
.085	-.093				.840				.50	-.039	-.002	.815	.799
.102	-.124				.853				.55	I		I	
.136	-.160	-.187	-.202	-.213	.870	.882	.889	.895	.60	.005	-.019	.796	.806
.169	-.189	-.229	-.235	-.239	.883	.902	.904	.907	.65	.046		.777	
.258	-.197	-.202	-.176	-.155	.887	.889	.877	.868	.70	.040	-.004	.779	.800
.300	-.118	-.135	-.114	-.092	.850	.859	.849	.839	.75	.041		.780	
.400	-.089	-.100	-.085	-.067	.838	.843	.836	.828	.80	.021	-.001	.788	.798
.500	-.117	-.123	-.098	-.097	.850	.854	.841	.842	.85	.012		.792	
.600	-.134	-.126	-.110	-.116	.858	.855	.847	.851	.90	.009		.794	
.700	-.110	-.109	-.107	-.115	.847	.847	.846	.850					
.800	-.091	-.083	-.077	-.089	.839	.836	.832	.838					
.900	-.038	-.027	-.023	-.020	.815	.811	.808	.807					
.950	.017	.021	.023	.015	.791	.788	.787	.791					
.980	.041	.080	.067	.053	.762	.762	.767	.774					

(l) $M_\infty = 0.80$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.91$

X/L	CP AT PHI =				MI AT PHI =				X/C	CP		MI	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.360		-.304		.962		.936		0.00	-.063	-.049	.826	.820
0.000	I				I				.05	-.063		.826	
.008	.637				.498				.10	-.059	-.031	.826	.811
.015	.472	.075	-.332	-.462	.582	.766	.949	1.010	.15	-.093		.841	
.021	.363				.634				.20	-.093	.002	.841	.797
.028	.275				.674				.25	-.085	.021	.838	.788
.034	.206	-.135	-.403	-.466	.706	.860	.982	1.012	.30	-.086	.059	.838	.771
.042	.181				.718				.35	-.088	.030	.839	.784
.051	.124				.744				.40	-.057	.025	.825	.787
.068	.066	-.186	-.311	-.308	.770	.882	.941	.937	.45	-.038	.019	.815	.789
.085	.112				.793				.50	.002	.015	.797	.791
.102	-.028				.811				.55	I		I	
.136	-.069	-.232	-.255	-.251	.829	.903	.915	.911	.60	.029	-.006	.784	.800
.169	-.124	-.271	-.272	-.262	.854	.921	.923	.917	.65	.064		.769	
.258	-.168	-.243	-.188	-.149	.874	.908	.885	.865	.70	.058	.003	.773	.797
.300	-.087	-.177	-.119	-.084	.838	.877	.853	.835	.75	.044		.779	
.400	-.067	-.139	-.084	-.056	.830	.860	.838	.823	.80	.029	.007	.786	.794
.500	-.121	-.158	-.090	-.084	.845	.869	.840	.836	.85	.021		.788	
.600	-.127	-.160	-.101	-.097	.855	.870	.844	.841	.90	.020		.789	
.700	-.114	-.143	-.096	-.089	.849	.861	.842	.837					
.800	-.106	-.110	-.065	-.064	.846	.847	.827	.826					
.900	-.062	-.049	-.007	-.005	.826	.820	.801	.800					
.950	-.009	.004	.028	.018	.802	.796	.785	.790					
.980	.062	.059	.067	.053	.770	.771	.769	.774					

TABLE X. - Continued

(m) $M_\infty = 0.85$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.032	-.077			.863	.884			0.00	-.057	-.064	.976	.878
0.000	↑				↑				.25	-.075		.894	
.008	.210				.746				.10	-.081	-.062	.888	.878
.015	.074	.110	.126	.100	.812	.794	.797	.799	.15	-.134		.914	
.021	-.001				.849				.20	-.147	-.048	.919	.871
.028	-.069				.881				.25	-.150	-.032	.920	.863
.034	-.144	-.100	-.091	-.096	.917	.896	.892	.894	.30	-.182	.033	.936	.831
.042	-.117				.904				.35	-.191	-.022	.940	.858
.051	-.174				.932				.40	-.168	-.021	.929	.857
.068	-.174	-.150	-.143	-.133	.932	.921	.918	.912	.45	-.150	-.025	.920	.860
.085	-.199				.944				.50	-.098	-.026	.895	.860
.102	-.231				.960				.55	↑		↑	
.136	-.255	-.191	-.169	-.180	.972	.941	.931	.936	.60	-.014	-.035	.853	.865
.169	-.257	-.246	-.225	-.232	.973	.969	.958	.962	.65	.029		.833	
.258	-.231	-.210	-.186	-.167	.961	.951	.938	.929	.70	.032	-.017	.832	.855
.300	-.130	-.132	-.117	-.101	.911	.912	.904	.896	.75	.027		.834	
.400	-.094	-.095	-.090	-.079	.893	.894	.890	.886	.80	.007	-.012	.844	.853
.500	-.122	-.125	-.116	-.123	.907	.908	.903	.908	.85	-.005		.850	
.600	-.133	-.131	-.136	-.147	.912	.911	.913	.919	.90	-.007		.851	
.700	-.105	-.108	-.141	-.150	.898	.900	.916	.921					
.800	-.073	-.081	-.107	-.128	.883	.887	.899	.910					
.900	-.006	-.021	-.044	-.054	.850	.858	.868	.873					
.950	.052	.031	.005	-.017	.822	.833	.845	.855					
.980	.107	.093	.064	.060	.796	.802	.816	.818					

(n) $M_\infty = 0.90$, $\alpha = -2.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.290	-.057			.747	.926			0.00	-.240	-.060	.921	.930
0.000	↑				↑				.05	-.064		.934	
.008	.115				.841				.10	-.286	-.064	.945	.932
.015	-.024	.143	.228	.242	.912	.825	.782	.774	.15	-.145		.976	
.021	-.280				.941				.20	-.164	-.054	.986	.927
.028	-.141				.974				.25	-.169	-.034	.989	.917
.034	-.228	-.038	.005	.013	1.022	.944	.898	.892	.30	-.208	.035	1.011	.880
.042	-.156				.983				.35	-.224	-.030	1.019	.914
.051	-.342				1.085				.40	-.201	-.030	1.006	.914
.068	-.198	-.145	-.097	-.079	1.035	.975	.951	.940	.45	-.176	-.029	.994	.912
.085	-.229				1.022				.50	-.120	-.027	.963	.911
.102	-.287				1.054				.55	↑		↑	
.136	-.310	-.201	-.158	-.166	1.067	1.005	.983	.985	.60	-.011	-.030	.906	.912
.169	-.302	-.287	-.259	-.266	1.063	1.053	1.038	1.039	.65	.040		.879	
.258	-.274	-.265	-.227	-.191	1.047	1.040	1.021	.998	.70	.041	-.012	.879	.903
.300	-.119	-.127	-.129	-.118	.963	.971	.968	.958	.75	.025		.886	
.400	-.091	-.100	-.097	-.084	.947	.951	.951	.940	.80	.024	-.025	.896	.899
.500	-.131	-.145	-.128	-.138	.968	.975	.967	.969	.85	-.008		.903	
.600	-.137	-.151	-.162	-.169	.971	.978	.986	.986	.90	-.004		.900	
.700	-.100	-.129	-.169	-.179	.951	.967	.989	.991					
.800	-.061	-.094	-.132	-.154	.930	.946	.969	.977					
.900	.014	-.022	-.060	-.074	.891	.908	.931	.935					
.950	.075	.038	-.005	-.030	.860	.877	.902	.912					
.980	.125	.099	.065	.055	.834	.845	.866	.868					

TABLE X. - Continued

(o) $M_\infty = 0.90$, $\alpha = 0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	-.008	-.062			.903	.931			0.00	-.057	-.073	.926	.936
0.00	!				!				.05	-.072		.934	
.008	.253				.766				.10	-.093	-.066	.946	.933
.015	.121	.139	.140	.130	.834	.825	.824	.831	.15	-.149		.976	
.021	.033				.880				.20	-.157	-.043	.981	.921
.028	-.040				.919				.25	-.157	-.023	.982	.911
.034	-.117	-.083	-.064	-.072	.960	.942	.930	.936	.30	-.190	.051	1.000	.872
.042	-.090				.946				.35	-.202	-.011	1.006	.924
.051	-.197				1.004				.40	-.175	-.015	.991	.906
.068	-.165	-.139	-.144	-.136	.985	.973	.973	.970	.45	-.150	-.018	.978	.908
.085	-.200				1.005				.50	-.092	-.020	.947	.909
.102	-.245				1.030				.55	!		!	
.136	-.258	-.194	-.179	-.185	1.037	1.004	.992	.997	.60	-.003	-.030	.900	.914
.169	-.292	-.287	-.278	-.309	1.055	1.053	1.048	1.065	.65	.041		.877	
.258	-.272	-.256	-.212	-.185	1.044	1.035	1.011	.997	.70	.038	-.015	.879	.906
.300	-.125	-.130	-.122	-.107	.965	.967	.963	.955	.75	.030		.881	
.400	-.095	-.095	-.093	-.080	.947	.948	.948	.940	.80	.013	-.009	.891	.973
.500	-.132	-.134	-.120	-.133	.968	.969	.961	.969	.85	-.001		.900	
.600	-.145	-.143	-.149	-.156	.976	.974	.977	.981	.90	-.004		.922	
.700	-.112	-.123	-.150	-.158	.960	.963	.978	.982					
.800	-.078	-.087	-.113	-.134	.939	.944	.958	.967					
.900	-.004	-.016	-.042	-.056	.900	.907	.920	.927					
.950	.061	.043	.013	-.012	.867	.876	.892	.903					
.980	.118	.104	.071	.057	.837	.845	.862	.867					

(p) $M_\infty = 0.90$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-1.00	-.260	-.054			1.038	.927			0.00	-.058	-.069	.929	.934
0.00	!				!				.05	-.074		.937	
.008	.393				.696				.10	-.076	-.054	.939	.926
.015	.237	.143	.048	.013	.776	.824	.873	.892	.15	-.135		.970	
.021	.145				.823				.20	-.144	-.024	.975	.911
.028	.061				.867				.25	-.142	-.002	.974	.899
.034	-.015	-.033	-.141	-.153	.907	.942	.973	.979	.30	-.166	.059	.987	.868
.042	-.012				.905				.35	-.171	.008	.989	.894
.051	-.088				.945				.40	-.143	.023	.974	.897
.068	-.105	-.142	-.193	-.180	.953	.974	.996	.994	.45	-.115	-.003	.959	.900
.085	-.144				.975				.50	-.062	-.008	.931	.903
.102	-.154				1.001				.55	!		!	
.136	-.224	-.200	-.194	-.222	1.019	1.024	1.002	1.006	.60	.012	-.021	.892	.909
.169	-.265	-.289	-.295	-.332	1.041	1.054	1.058	1.078	.65	.052		.872	
.258	-.289	-.249	-.204	-.176	1.054	1.031	1.007	.992	.70	.049	-.007	.873	.902
.300	-.125	-.131	-.118	-.097	.964	.968	.961	.959	.75	.039		.878	
.400	-.022	-.093	-.087	-.075	.947	.948	.944	.938	.80	.019	-.001	.888	.899
.500	-.135	-.134	-.115	-.123	.970	.970	.959	.964	.85	.010		.893	
.600	-.152	-.143	-.139	-.144	.979	.974	.972	.975	.90	.009		.894	
.700	-.123	-.120	-.137	-.149	.963	.962	.971	.977					
.800	-.090	-.088	-.096	-.114	.946	.945	.949	.959					
.900	-.021	-.019	-.026	-.033	.909	.908	.912	.916					
.950	.043	.045	.025	.012	.876	.875	.886	.892					
.980	.111	.107	.079	.065	.841	.843	.857	.865					

TABLE X. - Continued

(q) $M_\infty = 0.90$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.130	-.427	-.398			1.131	.949			0.00	-.058	-.065	.929	.931
0.000	1				1				.05	-.068		.935	
.038	.506				.636				.10	-.080	-.040	.940	.917
.015	.343	.144	-.043	-.106	.721	.824	.921	.954	.15	-.124		.964	
.021	.243				.773				.20	-.129	-.005	.966	.899
.029	.155				.818				.25	-.125	.015	.965	.889
.034	.078	-.099	-.216	-.260	.858	.943	1.014	1.038	.30	-.143	.070	.974	.862
.042	.069				.862				.35	-.140	.027	.972	.884
.051	.002				.897				.40	-.108	.022	.955	.887
.068	-.042	-.155	-.263	-.314	.920	.976	1.039	1.068	.45	-.082	.014	.942	.891
.035	-.039				.945				.50	-.029	.028	.914	.895
.102	-.136				.970				.55	1			
.136	-.183	-.225	-.220	-.214	.996	1.017	1.016	1.013	.60	.025	-.010	.885	.904
.169	-.234	-.299	-.305	-.337	1.023	1.057	1.063	1.081	.65	.065		.865	
.258	-.297	-.269	-.271	-.166	1.055	1.040	1.016	.986	.70	.058	-.001	.868	.898
.300	-.123	-.133	-.116	-.095	.964	.969	.960	.948	.75	.049		.873	
.400	-.087	-.104	-.085	-.072	.944	.952	.943	.935	.80	.028	.006	.882	.894
.500	-.132	-.141	-.111	-.114	.966	.973	.947	.957	.85	.017		.888	
.600	-.156	-.147	-.129	-.133	.979	.976	.967	.967	.90			.888	
.700	-.132	-.123	-.122	-.127	.966	.964	.963	.965					
.800	-.104	-.091	-.084	-.095	.951	.946	.943	.947					
.900	-.033	-.027	-.013	-.015	.916	.909	.905	.906					
.950	.026	.041	.039	.025	.883	.877	.878	.894					
.960	.100	.099	.084	.071	.845	.847	.855	.861					

(r) $M_\infty = 0.90$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.93$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.130	-.535	-.271			1.182	1.045			0.00	-.052	-.047	.924	.921
0.000	1				1				.05	-.051		.923	
.008	.685				.537				.10	-.054	-.017	.925	.905
.015	.527	.142	-.247	-.378	.623	.823	1.028	1.115	.15	-.099		.949	
.021	.409				.636				.20	-.099	.026	.949	.883
.028	.319				.732				.25	-.087	.045	.942	.875
.034	.248	-.094	-.384	-.454	.769	.946	1.106	1.149	.30	-.090	.082	.944	.856
.042	.220				.783				.35	-.086	.053	.942	.871
.051	.151				.819				.40	-.042	.044	.922	.875
.068	.085	-.192	-.442	-.540	.852	.998	1.139	1.291	.45	-.026	.035	.910	.880
.085	.027				.892				.50	.021	.027	.886	.884
.102	-.025				.910				.55	1			
.136	-.080	-.282	-.296	-.299	.938	1.048	1.055	1.054	.60	.054	.026	.869	.895
.169	-.158	-.366	-.306	-.307	.980	1.095	1.061	1.064	.65	.090		.850	
.253	-.252	-.331	-.197	-.154	1.031	1.075	1.031	.980	.70	.074	.015	.858	.891
.300	-.114	-.175	-.117	-.082	.956	.999	.958	.942	.75	.062		.865	
.400	-.073	-.145	-.090	-.065	.935	.975	.944	.933	.80	.044	.018	.873	.890
.500	-.118	-.178	-.109	-.099	.958	.993	.955	.952	.85	.032		.880	
.600	-.154	-.133	-.119	-.110	.978	.995	.959	.956	.90	.032		.880	
.700	-.136	-.158	-.111	-.104	.969	.982	.955	.956					
.800	-.119	-.120	-.048	-.069	.950	.962	.932	.936					
.900	-.065	-.042	.001	.003	.930	.920	.896	.899					
.950	-.001	.021	.043	.029	.897	.887	.874	.885					
.980	.080	.092	.076	.069	.857	.856	.857	.854					

TABLE X. - Continued

(s) $M_\infty = 0.92$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	C _D AT PHI =				M _L AT PHI =				X/C	C _P		M _L	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.002	-.058			.920	.951			0.00	-.047	-.072	.942	.957
0.000	!				!				.05	-.068		.954	
.018	.273				.770				.10	-.091	-.059	.966	.952
.015	.129	.153	.161	.154	.848	.833	.831	.838	.15	-.151		.998	
.021	.052				.889				.20	-.164	-.034	1.006	.939
.028	-.073				.929				.25	-.164	-.015	1.006	.928
.034	-.103	-.062	-.053	-.053	.972	.951	.945	.949	.30	-.191	.057	1.022	.890
.042	-.069				.954				.35	-.292	-.002	1.027	.921
.051	-.217				1.036				.40	-.174	-.006	1.012	.924
.068	-.162	-.128	-.132	-.126	1.000	.988	.988	.989	.45	-.144	-.010	.996	.925
.085	-.186				1.019				.50	-.087	-.014	.964	.927
.112	-.239				1.047				.55	!		!	
.136	-.284	-.218	-.172	-.169	1.074	1.039	1.010	1.013	.60	.006	-.027	.914	.934
.169	-.275	-.272	-.274	-.303	1.068	1.070	1.068	1.088	.65	.049		.891	
.258	-.386	-.338	-.280	-.235	1.135	1.110	1.071	1.049	.70	.048	-.009	.891	.925
.300	-.154	-.130	-.120	-.119	1.000	.991	.982	.985	.75	.032		.900	
.400	-.083	-.084	-.085	-.075	.961	.966	.962	.960	.80	.016	-.002	.910	.921
.500	-.136	-.139	-.124	-.134	.992	.996	.984	.992	.85	.004		.916	
.600	-.157	-.150	-.154	-.162	1.003	1.002	1.001	1.008	.90	-.004		.916	
.700	-.121	-.127	-.158	-.166	.984	.989	1.003	1.009					
.800	-.077	-.088	-.112	-.140	.960	.968	.977	.995					
.900	.003	-.014	-.039	-.053	.918	.927	.938	.947					
.950	.065	.047	.014	-.004	.885	.895	.910	.920					
.980	.125	.109	.077	.072	.854	.862	.876	.880					

(t) $M_\infty = 0.94$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	C _D AT PHI =				M _L AT PHI =				X/C	C _P		M _L	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.302	-.030			.773	.953			0.00	-.119	-.077	1.005	.981
0.000	!				!				.05	-.149		.966	
.008	.160				.851				.10	-.075	-.065	.980	.974
.015	.028	.131	.263	.272	.923	.840	.796	.789	.15	-.147		1.021	
.021	-.032				.956				.20	-.174	-.047	1.036	.962
.028	-.096				.992				.25	-.188	-.026	1.044	.951
.034	-.185	-.047	.038	.048	1.043	.964	.918	.910	.30	-.222	.062	1.065	.903
.042	-.134				.997				.35	-.240	-.017	1.075	.946
.051	-.279				1.099				.40	-.204	-.021	1.054	.948
.068	-.314	-.122	-.075	-.058	1.120	1.006	.980	.958	.45	-.178	-.024	1.039	.950
.085	-.261				1.088				.50	-.114	-.023	1.002	.949
.102	-.186				1.043				.55	!		!	
.136	-.306	-.209	-.140	-.139	1.114	1.056	1.017	1.014	.60	.002	-.025	.937	.950
.169	-.329	-.273	-.246	-.269	1.127	1.094	1.079	1.090	.65	.052		.910	
.258	-.431	-.378	-.320	-.285	1.173	1.159	1.123	1.099	.70	.047	-.009	.912	.942
.300	-.343	-.313	-.243	-.224	1.137	1.116	1.080	1.064	.75	.029		.922	
.400	-.251	-.273	-.273	-.272	.967	.977	.982	.976	.80	-.001	-.001	.939	.937
.500	-.119	-.140	-.124	-.135	1.005	1.015	1.008	1.012	.85	-.005		.940	
.600	-.155	-.171	-.176	-.187	1.025	1.032	1.038	1.042	.90	-.005		.940	
.700	-.103	-.147	-.186	-.200	.998	1.019	1.043	1.052					
.800	-.059	-.098	-.133	-.157	.971	.991	1.013	1.026					
.900	.025	-.014	-.054	-.064	.924	.944	.968	.974					
.950	.086	.053	.005	-.021	.889	.907	.935	.950					
.980	.136	.114	.075	.060	.863	.875	.897	.905					

TABLE X. - Continued

(u) $M_\infty = 0.94$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.003	-.043			.940	.962			0.00	-.120	-.089	1.005	.988
0.000	?				?				.05	-.052		.967	
.008	.307				.772				.10	-.078	-.064	.982	.974
.015	.159	.186	.180	.173	.852	.837	.841	.844	.15	-.148		1.021	
.021	.078				.896				.20	-.169	-.233	1.234	.956
.028	-.001				.939				.25	-.178	-.009	1.030	.944
.034	-.076	-.044	-.031	-.033	.981	.962	.955	.956	.30	-.211	.077	1.058	.900
.042	-.045				.963				.35	-.216	-.001	1.061	.930
.051	-.213				1.059				.40	-.177	-.007	1.038	.942
.068	-.126	-.116	-.113	-.107	1.009	1.003	1.001	.998	.45	-.150	-.013	1.023	.945
.085	-.164				1.031				.50	-.092	-.016	.989	.947
.102	-.219				1.063				.55	?		?	
.136	-.276	-.218	-.184	-.188	1.096	1.062	1.042	1.044	.60	.009	-.028	.933	.954
.169	-.296	-.290	-.246	-.274	1.108	1.099	1.079	1.095	.65	.255		.928	
.258	-.391	-.373	-.340	-.301	1.167	1.156	1.135	1.112	.70	.050	-.013	.911	.946
.300	-.331	-.334	-.258	-.225	1.130	1.131	1.086	1.066	.75	.038		.918	
.400	-.353	-.361	-.268	-.266	.968	.972	.976	.975	.80	.012	-.006	.931	.942
.500	-.122	-.127	-.115	-.127	1.006	1.010	1.003	1.010	.85	.000		.938	
.600	-.164	-.158	-.165	-.174	1.030	1.027	1.031	1.037	.90	-.003		.940	
.700	-.124	-.134	-.174	-.180	1.008	1.013	1.036	1.040					
.800	-.078	-.089	-.117	-.140	.981	.988	1.004	1.017					
.900	.006	-.009	-.035	-.044	.935	.944	.958	.963					
.950	.074	.056	.026	.006	.897	.908	.924	.935					
.980	.133	.117	.086	.064	.866	.875	.891	.903					

(v) $M_\infty = 0.94$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.213	-.019			1.059	.949			0.00	-.094	-.076	.991	.980
0.000	?				?				.05	-.038		.959	
.008	.429				.706				.10	-.065	-.044	.975	.967
.015	.275	.180	.093	.063	.790	.840	.887	.904	.15	-.130		1.211	
.021	.186				.837				.20	-.151	-.005	1.023	.941
.028	.095				.886				.25	-.156	.017	1.026	.929
.034	.019	-.046	-.098	-.105	.928	.963	.993	.998	.30	-.175	.085	1.037	.893
.042	.024				.925				.35	-.177	.025	1.038	.925
.051	-.063				.973				.40	-.143	.018	1.018	.928
.068	-.078	-.121	-.208	-.277	.981	1.006	1.057	1.097	.45	-.108	.012	.999	.933
.085	-.120				1.006				.50	-.047	.025	.964	.935
.102	-.170				1.034				.55	?		?	
.136	-.217	-.216	-.228	-.274	1.061	1.061	1.068	1.096	.60	.031	-.012	.921	.945
.169	-.252	-.290	-.266	-.288	1.082	1.105	1.091	1.103	.65	.073		.898	
.258	-.381	-.362	-.349	-.308	1.161	1.149	1.141	1.116	.70	.065	.002	.903	.938
.300	-.344	-.335	-.265	-.224	1.138	1.133	1.090	1.065	.75	.053		.909	
.400	-.064	-.060	-.061	-.056	.974	.972	.972	.969	.80	.031	.010	.921	.932
.500	-.118	-.125	-.108	-.119	1.004	1.009	.999	1.004	.85	.018		.928	
.600	-.170	-.158	-.153	-.161	1.034	1.028	1.024	1.029	.90	.012		.932	
.700	-.137	-.136	-.152	-.161	1.015	1.015	1.024	1.029					
.800	-.092	-.089	-.100	-.115	.989	.988	.994	1.003					
.900	-.013	-.018	-.018	-.022	.946	.943	.948	.951					
.950	.050	.056	.039	.026	.906	.908	.917	.924					
.980	.126	.119	.092	.074	.870	.874	.888	.898					

TABLE X. - Continued

(w) $M_\infty = 0.94$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.429	-.073			1.192	.979			0.00	-.107	-.072	.998	.979
0.000	I				I				.05	-.035		.957	
.008	.539				.646				.10	-.055	-.035	.969	.958
.015	.382	.184	.005	-.047	.732	.838	.935	.965	.15	-.123		1.007	
.021	.278				.788				.20	-.137	.011	1.015	.932
.028	.192				.834				.25	-.138	.031	1.016	.921
.034	.114	-.047	-.173	-.223	.876	.965	1.036	1.065	.30	-.152	.085	1.024	.892
.042	.104				.882				.35	-.149	.040	1.022	.916
.051	.028				.923				.40	-.136	.032	.998	.921
.068	-.013	-.132	-.293	-.353	.946	1.012	1.110	1.143	.45	-.074	.024	.979	.925
.085	-.062				.972				.50	-.018	.015	.948	.930
.102	-.118				1.004				.55	I		I	
.136	-.156	-.233	-.274	-.288	1.026	1.069	1.096	1.103	.60	.042	-.005	.915	.941
.169	-.220	-.296	-.278	-.290	1.064	1.109	1.098	1.105	.65	.079		.895	
.258	-.357	-.362	-.358	-.310	1.146	1.149	1.146	1.117	.70	.071	.005	.899	.936
.300	-.320	-.344	-.270	-.203	1.123	1.138	1.093	1.053	.75	.058		.977	
.400	-.058	-.067	-.057	-.047	.971	.976	.970	.965	.80	.036	.015	.919	.930
.500	-.118	-.132	-.105	-.113	1.004	1.012	.997	1.011	.85	.023		.926	
.600	-.173	-.165	-.143	-.148	1.036	1.031	1.018	1.021	.90	.017		.929	
.700	-.145	-.139	-.136	-.143	1.020	1.016	1.015	1.018					
.800	-.106	-.051	-.084	-.095	.997	.989	.986	.990					
.900	-.032	-.012	-.004	-.016	.956	.945	.941	.941					
.950	.042	.054	.051	.040	.915	.909	.911	.916					
.980	.117	.113	.097	.080	.875	.877	.886	.894					

(x) $M_\infty = 0.94$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.395	-.258			1.167	1.083			0.00	-.018	-.048	.947	.963
0.000	I				I				.05	-.019		.947	
.008	.716				.544				.10	-.049	-.008	.963	.941
.015	.553	.186	-.184	-.314	.637	.836	1.040	1.117	.15	-.103		.994	
.021	.442				.698				.20	-.108	.037	.996	.916
.028	.354				.745				.25	-.098	.055	.991	.907
.034	.280	-.048	-.323	-.396	.786	.963	1.122	1.168	.30	-.104	.088	.994	.888
.042	.250				.801				.35	-.094	.058	.989	.905
.051	.195				.836				.40	-.057	.049	.968	.912
.068	.114	-.151	-.426	-.481	.874	1.027	1.187	1.223	.45	-.021	.039	.949	.915
.085	.055				.906				.50	.031	.031	.920	.919
.102	.001				.936				.55	I		I	
.136	-.049	-.271	-.375	-.421	.964	1.091	1.154	1.183	.60	.065	.078	.900	.932
.169	-.144	-.367	-.422	-.368	1.016	1.150	1.184	1.150	.65	.100		.882	
.258	-.300	-.461	-.394	-.311	1.108	1.210	1.167	1.115	.70	.083	.017	.891	.927
.300	-.275	-.410	-.194	-.141	1.094	1.177	1.046	1.016	.75	.070		.898	
.400	-.089	-.099	-.058	-.033	.986	.992	.968	.955	.80	.046	.028	.911	.921
.500	-.093	-.169	-.104	-.098	.991	1.031	.994	.991	.85	.033		.918	
.600	-.163	-.200	-.131	-.125	1.028	1.050	1.010	1.006	.90	.026		.922	
.700	-.151	-.177	-.121	-.114	1.021	1.032	1.004	1.000					
.800	-.122	-.119	-.067	-.071	1.005	1.003	.974	.976					
.900	-.058	-.029	.010	.027	.969	.953	.931	.933					
.950	.010	.038	.052	.037	.931	.916	.908	.916					
.980	.094	.095	.086	.076	.886	.885	.890	.895					

TABLE X. - Continued

(y) $M_\infty = 0.96$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.016	-.043			.949	.981			0.00	-.231	-.089	1.094	1.008
0.000	!				!				.05	-.181		1.063	
.008	.327				.778				.10	-.180	-.053	1.063	.987
.015	.182	.208	.205	.194	.857	.841	.845	.849	.15	-.155		1.048	
.021	.102				.901				.20	-.157	-.020	1.047	.968
.028	.026				.942				.25	-.159	.004	1.049	.954
.034	-.048	-.015	-.008	-.014	.984	.965	.963	.965	.30	-.195	.090	1.077	.936
.042	-.015				.965				.35	-.218	.010	1.084	.951
.051	-.187				1.065				.40	-.188	.005	1.065	.954
.068	-.100	-.091	-.037	-.083	1.014	1.009	1.008	1.004	.45	-.135	-.002	1.034	.958
.085	-.133				1.033				.50	-.074	-.009	.999	.962
.102	-.189				1.067				.55	!		!	
.136	-.245	-.203	-.193	-.214	1.101	1.075	1.071	1.081	.60	.022	-.023	.945	.959
.169	-.280	-.275	-.224	-.247	1.123	1.119	1.089	1.101	.65	.066		.919	
.258	-.388	-.354	-.327	-.299	1.190	1.168	1.152	1.134	.70	.061	-.007	.922	.960
.300	-.251	-.346	-.288	-.254	1.167	1.163	1.126	1.108	.75	.047		.930	
.400	-.218	-.198	-.193	-.190	1.083	1.072	1.069	1.067	.80	.022	.004	.944	.954
.500	-.170	-.151	-.152	-.161	1.055	1.044	1.044	1.051	.85	.011		.951	
.600	-.139	-.139	-.145	-.178	1.037	1.037	1.040	1.062	.90	.006		.953	
.700	-.123	-.132	-.160	-.165	1.029	1.033	1.049	1.054					
.800	-.073	-.091	-.117	-.136	.999	1.009	1.024	1.036					
.900	.016	.001	-.023	-.032	.948	.956	.973	.976					
.950	.086	.067	.034	.018	.908	.919	.938	.948					
.980	.144	.126	.095	.089	.876	.886	.903	.909					

(z) $M_\infty = 0.98$, $\alpha = -2.2^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.294	-.027			.811	.994			0.00	-.187	-.152	1.094	1.071
0.000	!				!				.05	-.151		1.072	
.008	.231				.849				.10	-.151	-.220	1.071	1.114
.015	.105	.244	.319	.331	.921	.841	.800	.794	.15	-.207		1.106	
.021	.041				.957				.20	-.225	-.149	1.118	1.070
.028	-.026				.997				.25	-.233	.021	1.123	.968
.034	-.110	.017	.009	.097	1.047	.971	.924	.925	.30	-.294	.124	1.163	.910
.042	-.039				1.004				.35	-.326	.037	1.184	.959
.051	-.201				1.103				.40	-.342	.031	1.194	.963
.068	-.251	-.066	-.018	-.011	1.134	1.019	.991	.988	.45	-.356	.022	1.204	.966
.085	-.245				1.131				.50	-.271	.017	1.145	.968
.102	-.228				1.117				.55	!		!	
.136	-.205	-.177	-.126	-.104	1.103	1.097	1.056	1.040	.60	.038	.007	.957	.974
.169	-.265	-.235	-.179	-.204	1.140	1.123	1.089	1.101	.65	.085		.930	
.258	-.372	-.326	-.244	-.263	1.212	1.182	1.156	1.138	.70	.080	.018	.933	.967
.300	-.329	-.319	-.256	-.226	1.183	1.178	1.138	1.114	.75	.054		.949	
.400	-.208	-.204	-.188	-.187	1.106	1.104	1.094	1.091	.80	.038	.026	.958	.963
.500	-.184	-.211	-.192	-.205	1.091	1.109	1.097	1.101	.85	.039		.957	
.600	-.213	-.223	-.230	-.250	1.109	1.117	1.121	1.130	.90	.048		.953	
.700	-.212	-.235	-.272	-.274	1.109	1.124	1.145	1.146					
.800	-.216	-.254	-.288	-.316	1.111	1.133	1.156	1.173					
.900	-.008	-.049	-.215	-.232	.985	1.007	1.109	1.119					
.950	.091	.081	.018	-.033	.928	.931	.969	.999					
.980	.128	.134	.085	.056	.907	.901	.930	.948					

TABLE X. - Continued

(aa) $M_\infty = 0.98$, $\alpha = -0.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	.007	-.034			.975	-.999			0.00	-.205	-.162	1.103	1.076
0.000	?				?				.05	-.164		1.078	
.008	.356				.777				.10	-.164	-.216	1.079	1.110
.015	.214	.238	.236	.230	.858	.844	.845	.848	.15	-.200		1.101	
.021	.137				.902				.20	-.214	.025	1.110	.965
.028	.064				.943				.25	-.220	.053	1.114	.949
.034	-.011	.018	.031	.028	.986	.968	.962	.963	.30	-.272	.132	1.147	.903
.042	.019				.970				.35	-.332	.055	1.165	.947
.051	-.154				1.071				.40	-.313	.047	1.172	.952
.068	-.173	-.056	-.050	-.049	1.040	1.012	1.009	1.008	.45	-.314	.038	1.173	.957
.095	-.097				1.036				.50	-.213	.031	1.107	.961
.132	-.155				1.071				.55	?		?	
.136	-.213	-.171	-.166	-.191	1.108	1.092	1.080	1.094	.60	.044	.013	.953	.971
.169	-.249	-.245	-.197	-.216	1.130	1.127	1.099	1.110	.65	.099		.921	
.258	-.356	-.321	-.293	-.270	1.200	1.178	1.161	1.144	.70	.095	.023	.924	.966
.330	-.326	-.318	-.263	-.231	1.180	1.175	1.141	1.119	.75	.080		.933	
.400	-.209	-.193	-.183	-.182	1.105	1.095	1.089	1.088	.80	.057	.031	.946	.961
.500	-.191	-.201	-.182	-.195	1.094	1.100	1.088	1.097	.85	.047		.952	
.600	-.219	-.215	-.220	-.238	1.112	1.109	1.112	1.123	.90	.044		.953	
.700	-.222	-.227	-.258	-.260	1.113	1.117	1.136	1.137					
.800	-.230	-.246	-.274	-.297	1.118	1.128	1.147	1.162					
.900	-.071	-.117	-.179	-.113	1.021	1.048	1.086	1.047					
.950	.103	.065	.018	-.039	.920	.939	.968	.986					
.980	.151	.132	.092	.072	.892	.903	.926	.938					

(bb) $M_\infty = 0.98$, $\alpha = 2.0^\circ$, and $\dot{m}/\dot{m}_\infty = 0.96$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.199	-.013			1.099	.985			0.00	-.213	-.165	1.107	1.078
0.000	?				?				.05	-.161		1.075	
.008	.474				.711				.10	-.159	-.206	1.073	1.103
.015	.327	.230	.149	.127	.793	.846	.893	.906	.15	-.181		1.087	
.021	.230				.848				.20	-.198	.039	1.098	.957
.028	.153				.891				.25	-.208	.065	1.104	.941
.034	.075	.014	-.040	-.044	.936	.972	1.002	1.004	.30	-.250	.133	1.131	.902
.042	.076				.935				.35	-.276	.075	1.147	.935
.051	-.025				.994				.40	-.283	.066	1.152	.940
.068	-.034	-.072	-.191	-.223	.998	1.023	1.093	1.113	.45	-.282	.054	1.151	.947
.085	-.168				1.018				.50	-.121	.043	1.050	.954
.102	-.114				1.046				.55	?		?	
.136	-.161	-.170	-.193	-.190	1.075	1.083	1.095	1.093	.60	.057	.020	.946	.967
.169	-.212	-.250	-.218	-.230	1.107	1.131	1.110	1.118	.65	.113		.914	
.258	-.331	-.318	-.316	-.287	1.195	1.175	1.173	1.154	.70	.111	.029	.915	.962
.300	-.306	-.330	-.274	-.234	1.169	1.183	1.146	1.120	.75	.094		.926	
.400	-.207	-.193	-.177	-.173	1.106	1.094	1.085	1.082	.80	.073	.036	.933	.958
.500	-.156	-.200	-.177	-.191	1.100	1.099	1.085	1.088	.85	.058		.946	
.600	-.224	-.214	-.212	-.227	1.116	1.108	1.106	1.116	.90	.047		.953	
.700	-.227	-.226	-.245	-.247	1.118	1.115	1.127	1.129					
.800	-.243	-.243	-.259	-.278	1.127	1.126	1.136	1.149					
.900	-.022	-.066	-.138	-.110	.992	1.017	1.061	1.044					
.950	.084	.057	.032	.018	.930	.946	.961	.968					
.980	.146	.137	.104	.086	.895	.900	.920	.929					

TABLE X. - Concluded

(cc) $M_\infty = 0.98$, $\alpha = 4.1^\circ$, and $\dot{m}/\dot{m}_\infty = 0.95$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.383	-.241			1.221	1.035			0.00	-.219	-.170	1.111	1.081
0.000	I				I				.05	-.157		1.073	
.008	.579				.652				.10	-.156	-.192	1.072	1.095
.015	.424	.243	.071	.020	.739	.841	.938	.971	.15	-.177		1.085	
.021	.325				.794				.20	-.191	.037	1.094	.957
.029	.240				.842				.25	-.192	.063	1.094	.943
.034	.170	.016	-.117	-.154	.882	.970	1.048	1.075	.30	-.231	.130	1.119	.907
.042	.155				.890				.35	-.254	.087	1.134	.932
.051	.079				.934				.40	-.257	.078	1.136	.937
.068	.034	-.084	-.241	-.282	.959	1.029	1.125	1.156	.45	-.243	.064	1.127	.943
.085	-.014				.987				.50	-.106	.053	1.042	.950
.102	-.065				1.017				.55	I		I	
.136	-.097	-.191	-.239	-.275	1.036	1.094	1.124	1.149	.60	.070	.027	.939	.965
.169	-.168	-.253	-.286	-.242	1.079	1.136	1.154	1.128	.65	.117		.912	
.258	-.310	-.339	-.324	-.289	1.170	1.190	1.179	1.159	.70	.116	.034	.912	.961
.300	-.288	-.333	-.277	-.231	1.156	1.185	1.148	1.121	.75	.101		.921	
.400	-.209	-.190	-.173	-.162	1.106	1.100	1.083	1.078	.80	.079	.041	.933	.957
.500	-.200	-.203	-.171	-.172	1.100	1.105	1.082	1.084	.85	.063		.943	
.600	-.226	-.219	-.207	-.213	1.116	1.116	1.104	1.109	.90	.051		.950	
.700	-.233	-.224	-.236	-.235	1.120	1.119	1.122	1.123					
.800	-.253	-.249	-.246	-.250	1.133	1.133	1.128	1.131					
.900	-.142	-.159	-.088	-.020	1.064	1.064	1.031	.991					
.950	.049	.035	.039	.057	.951	.960	.956	.946					
.980	.113	.116	.102	.091	.912	.913	.920	.927					

(dd) $M_\infty = 0.98$, $\alpha = 8.3^\circ$, and $\dot{m}/\dot{m}_\infty = 0.94$

X/L	CP AT PHI =				ML AT PHI =				X/C	CP		ML	
	180	90	45	330	180	90	45	330		LOWER	UPPER	LOWER	UPPER
-.100	-.536	-.250			1.325	1.129			0.00	-.227	-.168	1.116	1.078
0.000	I				I				.05	-.145		1.066	
.008	.751				.550				.10	-.143	-.004	1.063	.990
.015	.595	.243	-.109	-.235	.642	.841	1.044	1.119	.15	-.163		1.076	
.021	.485				.705				.20	-.173	.068	1.082	.937
.028	.395				.756				.25	-.173	.083	1.082	.929
.034	.323	.013	-.249	-.319	.796	.971	1.130	1.173	.30	-.206	.131	1.103	.902
.042	.295				.811				.35	-.219	.094	1.111	.923
.051	.231				.847				.40	-.211	.085	1.105	.928
.068	.163	-.108	-.354	-.404	.885	1.042	1.199	1.230	.45	-.099	.072	1.037	.935
.085	.106				.918				.50	.037	.061	.957	.941
.102	.052				.949				.55	I		I	
.136	.022	-.219	-.327	-.373	.966	1.110	1.181	1.229	.60	.065	.028	.941	.961
.169	-.033	-.309	-.376	-.341	1.033	1.168	1.214	1.187	.65	.126		.907	
.258	-.253	-.414	-.386	-.325	1.133	1.238	1.221	1.177	.70	.123	.033	.908	.958
.300	-.235	-.414	-.313	-.247	1.121	1.237	1.171	1.127	.75	.108		.916	
.400	-.188	-.268	-.173	-.153	1.091	1.140	1.082	1.068	.80	.082	.042	.931	.953
.500	-.218	-.248	-.169	-.160	1.110	1.127	1.080	1.072	.85	.068		.938	
.600	-.234	-.268	-.201	-.202	1.120	1.140	1.100	1.098	.90	.053		.947	
.700	-.237	-.273	-.228	-.219	1.122	1.143	1.117	1.109					
.800	-.264	-.269	-.206	-.173	1.139	1.140	1.103	1.078					
.900	-.213	-.011	-.018	.022	1.106	.983	.989	.963					
.950	.064	.059	.049	.051	.940	.943	.950	.947					
.980	.123	.089	.079	.073	.898	.926	.933	.934					

TABLE XI. - PRESSURE COEFFICIENTS AND LOCAL MACH NUMBERS
MEASURED ON THE SURFACE OF THE PYLON WITH THE NACELLE REMOVED

(a) $M_{\infty} = 0.39$ and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	-.027	-.075	.399	.408
.05	-.047		.403	
.10	-.068	-.077	.407	.409
.15	-.078		.408	
.20	-.081	-.095	.409	.412
.25	-.078	-.092	.409	.414
.30	-.082	I	.409	I
.35	-.115	-.098	.416	.415
.40	-.109	-.097	.415	.415
.45	-.110	-.097	.415	.415
.50	-.117	-.094	.416	.414
.55	I		I	
.60	-.074	I	.408	I
.65	-.074		.408	
.70	-.081	-.071	.409	.410
.75	-.081		.410	
.80	-.080	-.067	.409	.409
.85	-.079		.409	
.90	-.076		.409	

(b) $M_{\infty} = 0.60$ and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.006	-.032	.601	.613
.05	-.010		.606	
.10	-.034	-.053	.614	.620
.15	-.076		.628	
.20	-.070	-.059	.625	.621
.25	-.066	-.055	.624	.620
.30	-.067	I	.624	I
.35	-.073	-.069	.626	.625
.40	-.074	-.060	.627	.621
.45	-.081	-.064	.629	.623
.50	-.083	-.060	.629	.621
.55	I		I	
.60	-.039	I	.615	I
.65	-.047		.618	
.70	-.049	-.037	.619	.614
.75	-.044		.617	
.80	-.040	-.036	.615	.613
.85	-.028		.611	
.90	-.025		.610	

TABLE XI. - Continued

(c) $M_{\infty} = 0.70$ and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LCWER	UPPER	LOWER	UPPER
0.00	.035	.007	.683	.701
.05	.015		.691	
.10	-.007	-.013	.699	.706
.15	-.036		.710	
.20	-.031	-.023	.708	.706
.25	-.031	-.030	.708	.707
.30	-.033	I	.709	I
.35	-.054	-.043	.717	.711
.40	-.044	-.037	.714	.711
.45	-.045	-.039	.714	.714
.50	-.056	-.035	.718	.714
.55	I		I	
.60	-.025	I	.706	I
.65	-.017		.703	
.70	-.025	-.003	.708	.704
.75	-.021		.708	
.80	-.010	.003	.705	.702
.85	.005		.701	
.90	.011		.699	

(d) $M_{\infty} = 0.80$ and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.038	-.002	.782	.802
.05	.014		.792	
.10	-.005	-.021	.802	.811
.15	-.043		.821	
.20	-.027	-.028	.815	.812
.25	-.019	-.031	.811	.814
.30	-.025	I	.813	I
.35	-.054	-.037	.824	.816
.40	-.045	-.032	.820	.814
.45	-.056	-.034	.824	.815
.50	-.060	-.031	.826	.813
.55	I		I	
.60	-.020	I	.810	I
.65	-.018		.809	
.70	-.019	-.002	.810	.802
.75	-.012		.807	
.80	-.007	.008	.804	.797
.85	.003		.799	
.90	.007		.798	

TABLE XI. - Continued

(e) $M_{\infty} = 0.85$ and $\alpha = 0^\circ$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.017	-.029	.840	.862
.05	-.005		.851	
.10	-.028	-.049	.861	.872
.15	-.065		.880	
.20	-.055	-.057	.875	.876
.25	-.045	-.058	.870	.876
.30	-.070	I	.882	I
.35	-.084	-.063	.888	.879
.40	-.071	-.058	.883	.877
.45	-.072	-.057	.883	.876
.50	-.078	-.052	.886	.873
.55	I		I	
.60	-.048	I	.871	I
.65	-.042		.868	
.70	-.047	-.027	.871	.861
.75	-.040		.867	
.80	-.029	-.021	.862	.858
.85	-.021		.858	
.90	-.017		.856	

(f) $M_{\infty} = 0.90$ and $\alpha = 0^\circ$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.010	-.035	.894	.917
.05	-.010		.905	
.10	-.033	-.055	.916	.928
.15	-.070		.936	
.20	-.062	-.061	.932	.931
.25	-.051	-.062	.926	.931
.30	-.070	I	.936	I
.35	-.088	-.067	.945	.934
.40	-.076	-.057	.939	.929
.45	-.088	-.062	.946	.929
.50	-.091	-.055	.947	.927
.55	I		I	
.60	-.049	I	.925	I
.65	-.050		.925	
.70	-.047	-.031	.924	.914
.75	-.043		.922	
.80	-.035	-.021	.917	.909
.85	-.023		.911	
.90	-.022		.911	

TABLE XI. - Continued

(g) $M_{\infty} = 0.92$ and $\alpha = 0^\circ$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.030	-.023	.902	.929
.05	.010		.914	
.10	-.016	-.040	.928	.939
.15	-.055		.949	
.20	-.048	-.044	.945	.940
.25	-.035	-.043	.937	.940
.30	-.053	I	.947	I
.35	-.074	-.052	.959	.945
.40	-.062	-.044	.952	.941
.45	-.063	-.046	.953	.941
.50	-.075	-.039	.959	.938
.55	I		I	
.60	-.034	I	.937	I
.65	-.031		.935	
.70	-.033	-.014	.937	.924
.75	-.027		.933	
.80	-.018	-.004	.928	.919
.85	-.005		.922	
.90	-.002		.920	

(h) $M_{\infty} = 0.94$ and $\alpha = 0^\circ$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.038	-.018	.918	.948
.05	.014		.931	
.10	-.007	-.037	.943	.958
.15	-.048		.965	
.20	-.033	-.042	.957	.962
.25	-.025	-.037	.953	.959
.30	-.048	I	.965	I
.35	-.067	-.043	.976	.962
.40	-.057	-.036	.970	.959
.45	-.059	-.035	.971	.958
.50	-.068	-.030	.976	.955
.55	I		I	
.60	-.029	I	.953	I
.65	-.023		.950	
.70	-.026	-.004	.951	.941
.75	-.020		.948	
.80	-.010	.007	.942	.934
.85	.001		.936	
.90	.000		.937	

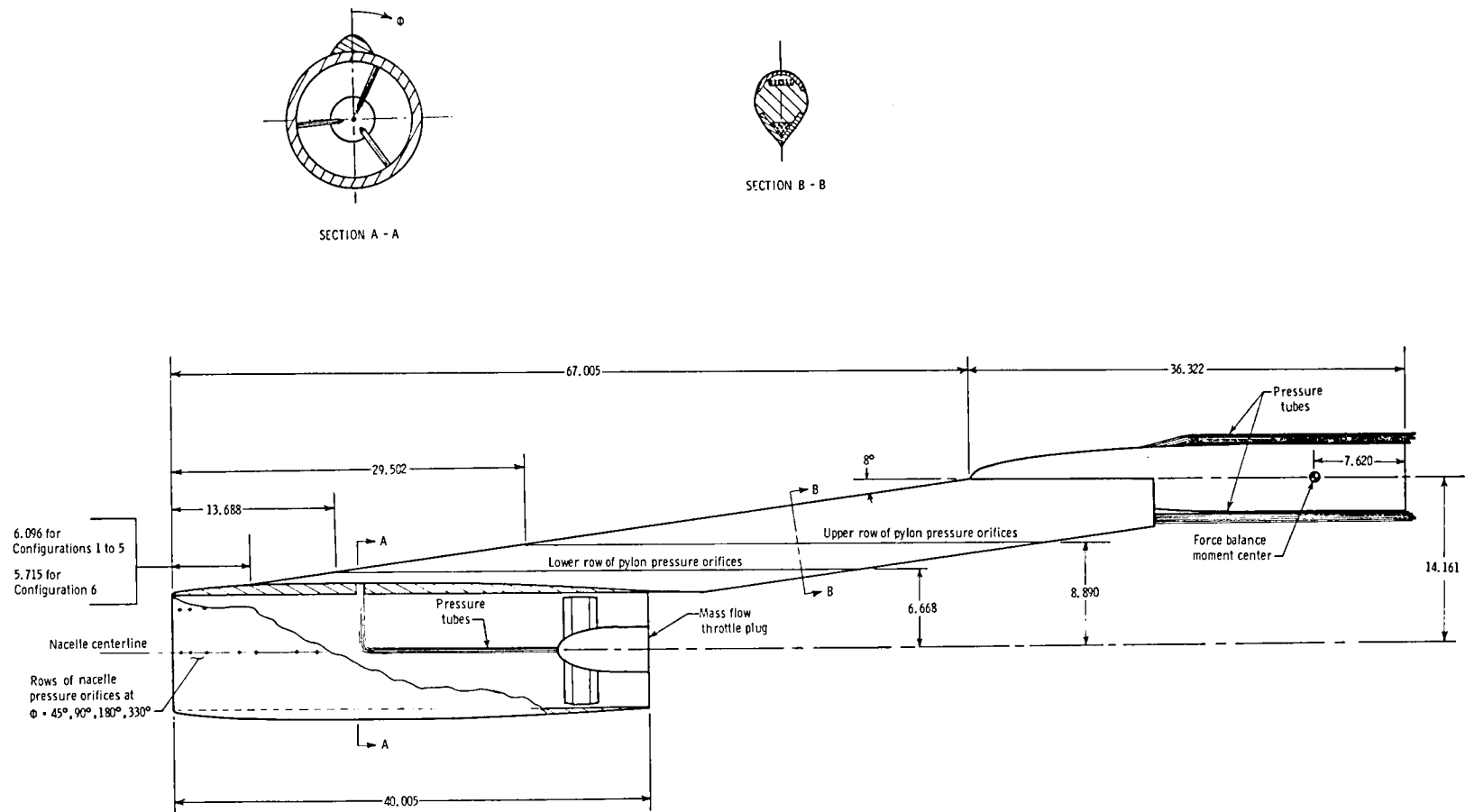
TABLE XI. - Concluded

(i) $M_{\infty} = 0.96$ and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.031	-.032	.941	.976
.05	.015		.948	
.10	-.015	-.047	.965	.984
.15	-.060		.991	
.20	-.052	-.051	.986	.986
.25	-.040	-.046	.980	.984
.30	-.059	I	.991	I
.35	-.079	-.052	1.002	.988
.40	-.069	-.044	.996	.983
.45	-.069	-.045	.996	.984
.50	-.083	-.039	1.004	.980
.55	I		I	
.60	-.034	I	.976	I
.65	-.034		.976	
.70	-.026	-.012	.971	.965
.75	-.030		.974	
.80	-.022	.004	.969	.956
.85	-.010		.962	
.90	-.008		.962	

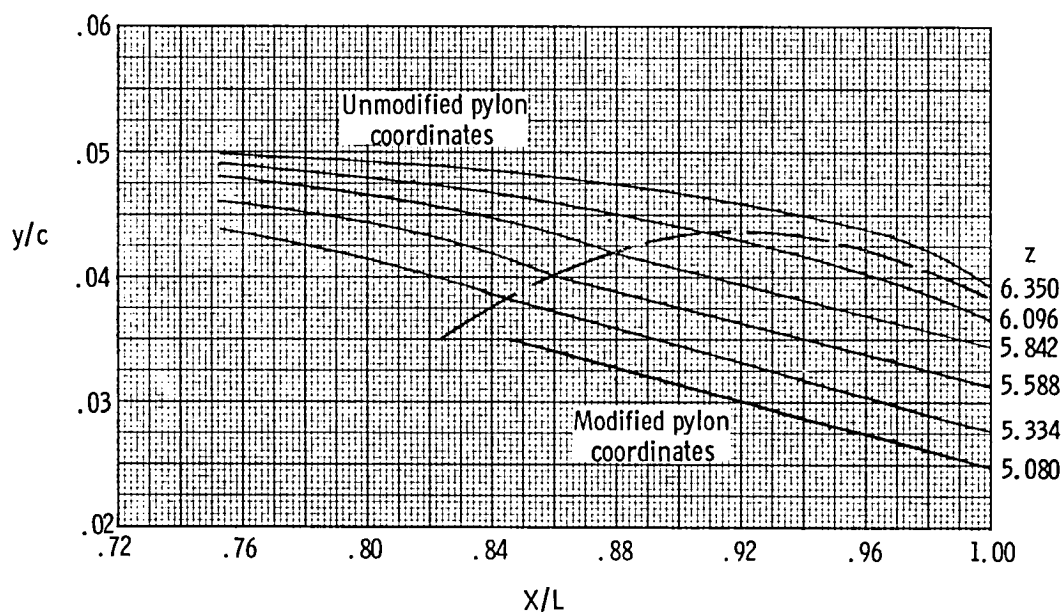
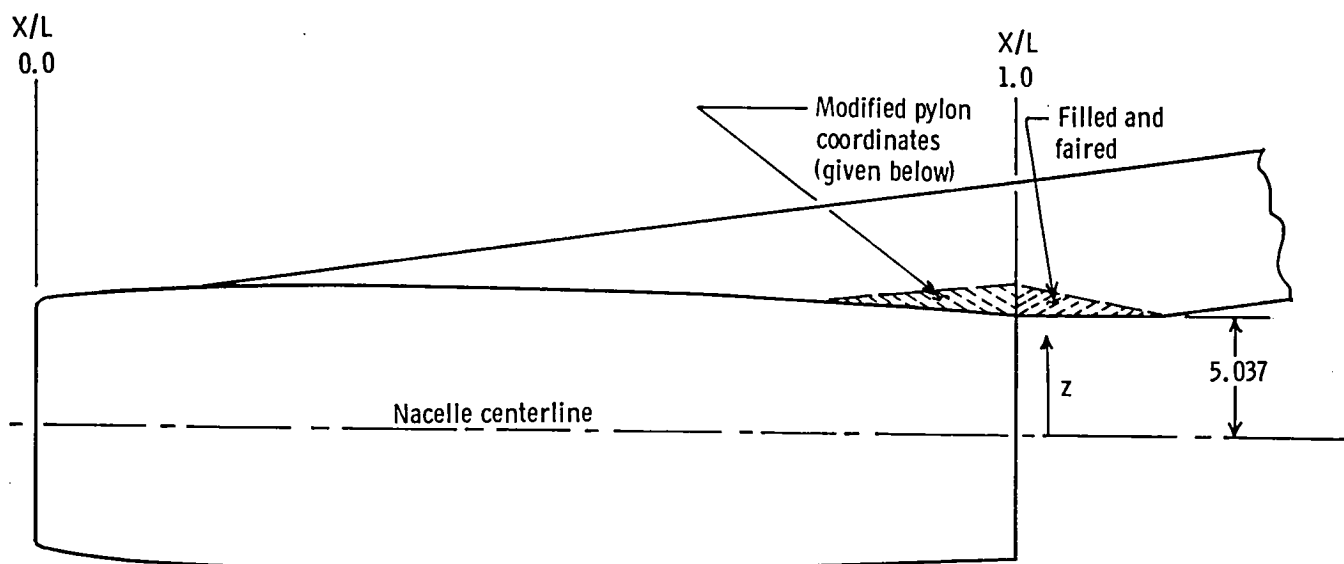
(j) $M_{\infty} = 0.98$, and $\alpha = 0^{\circ}$

X/C	CP		ML	
	LOWER	UPPER	LOWER	UPPER
0.00	.033	-.037	.960	.999
.05	.018		.969	
.10	-.014	-.055	.987	1.009
.15	-.060		1.014	
.20	-.054	-.053	1.009	1.008
.25	-.040	-.049	1.001	1.006
.30	-.063	I	1.014	I
.35	-.084	-.058	1.026	1.010
.40	-.081	-.049	1.025	1.005
.45	-.081	-.048	1.025	1.005
.50	-.100	-.040	1.036	1.000
.55	I		I	
.60	-.042	I	1.003	I
.65	-.036		.999	
.70	-.029	-.010	.995	.983
.75	-.033		.997	
.80	-.021	.007	.991	.973
.85	-.008		.983	
.90	-.009		.983	



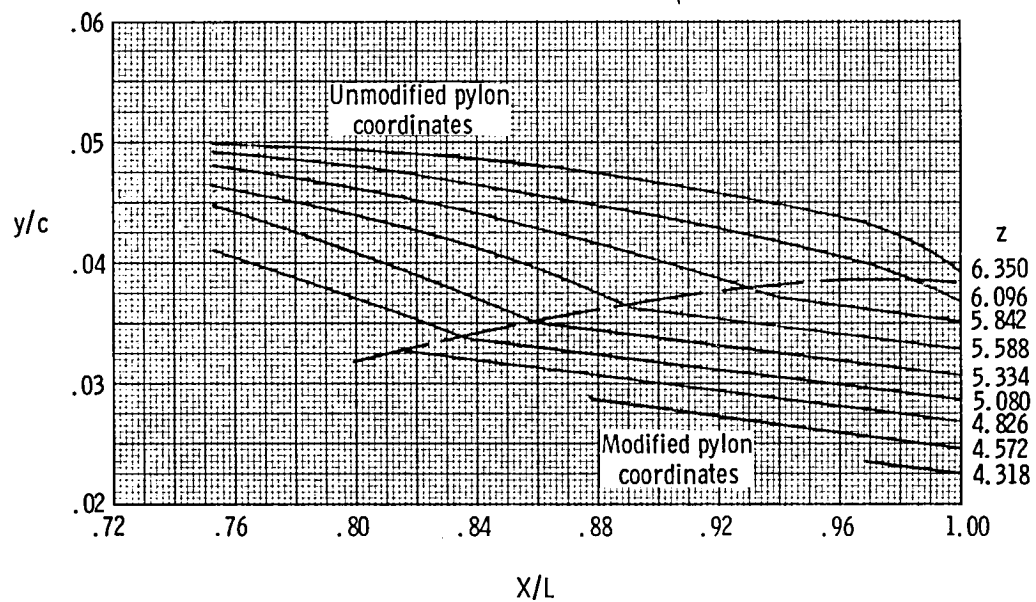
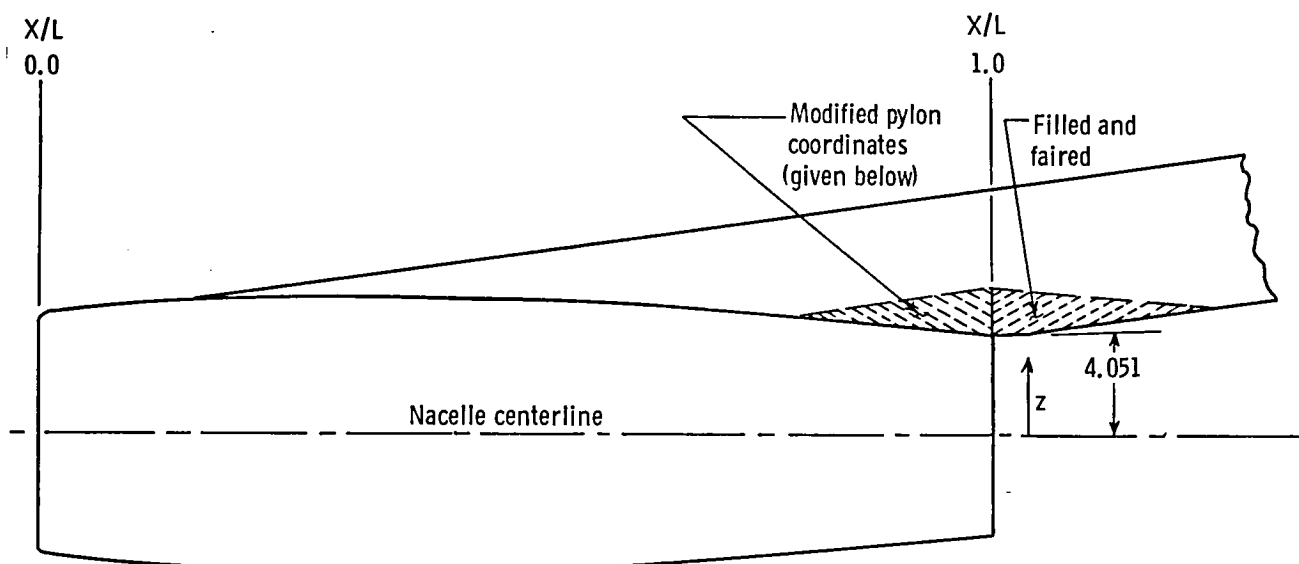
(a) Sketch of complete model with nacelle Configuration 2 installed.

Figure 1. - Model sketches. All dimensions are in centimeters unless otherwise indicated.

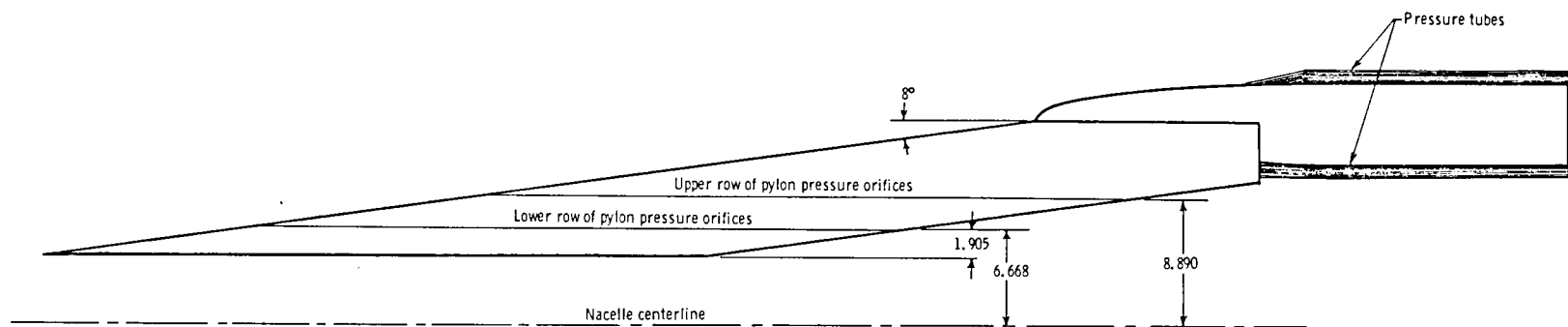


(b) Pylon coordinate modifications for Configurations 1 through 4.

Figure 1. - Continued.

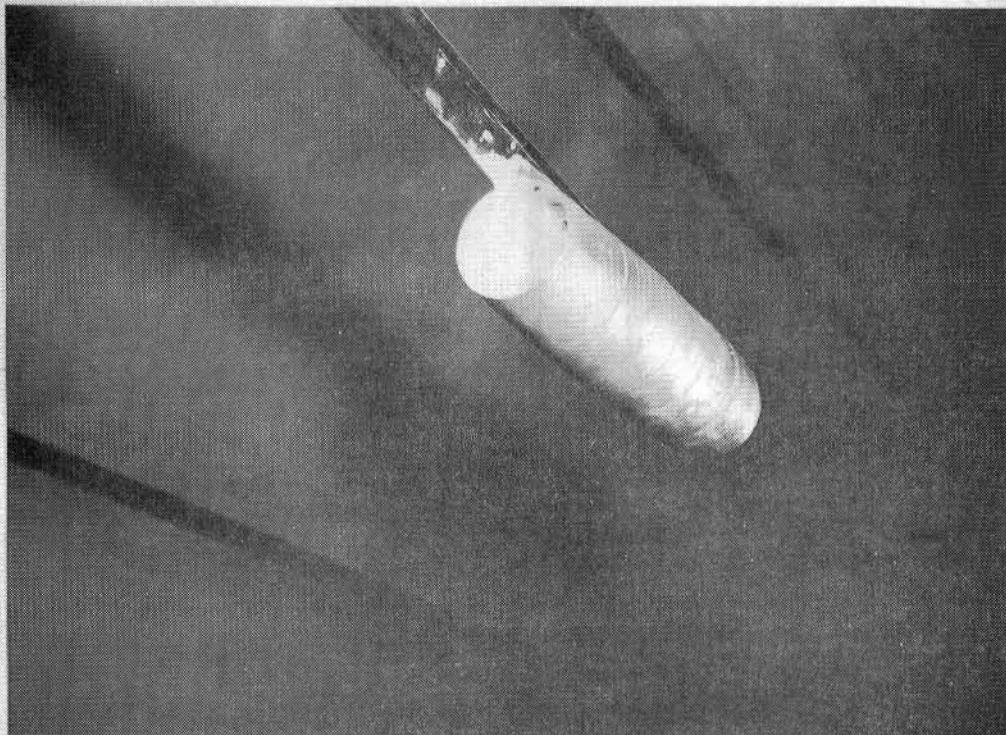


(c) Pylon coordinate modifications for Configurations 5 and 6.

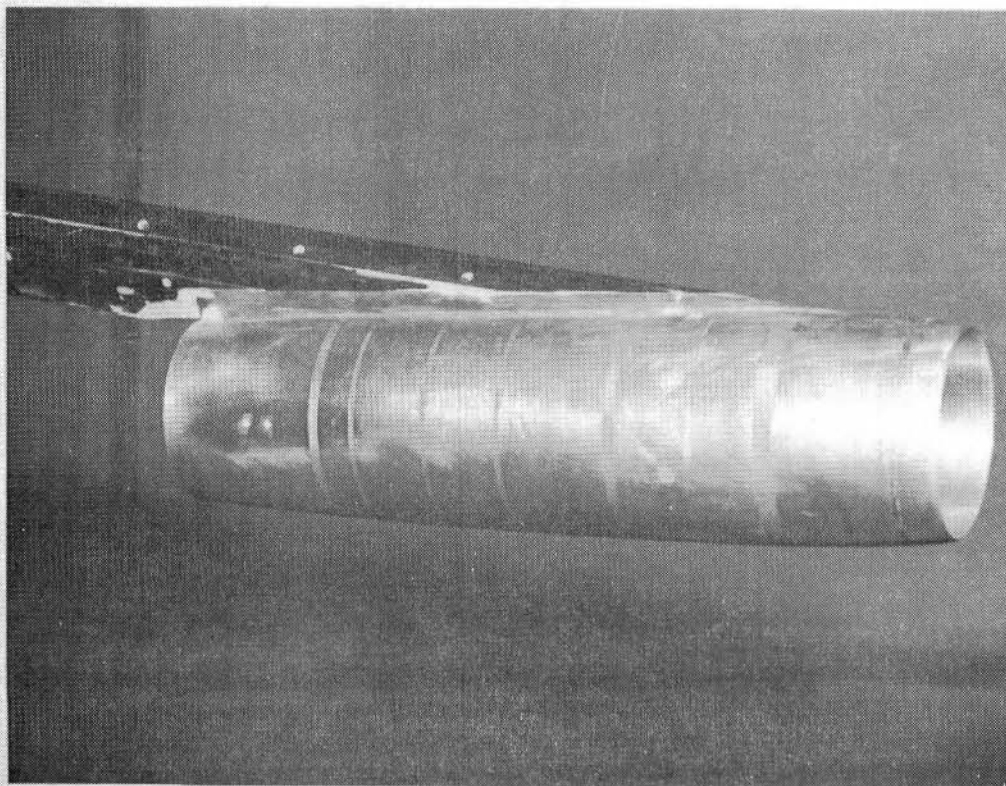


(d) Sketch of pylon with nacelle removed.

Figure 1. - Concluded.



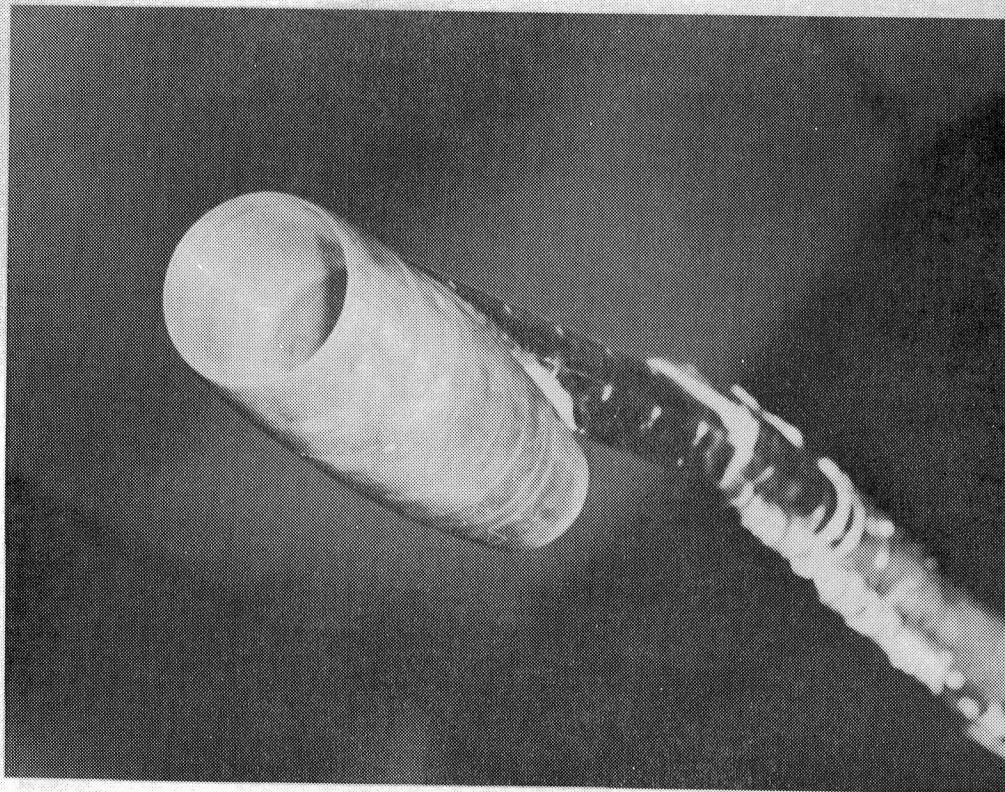
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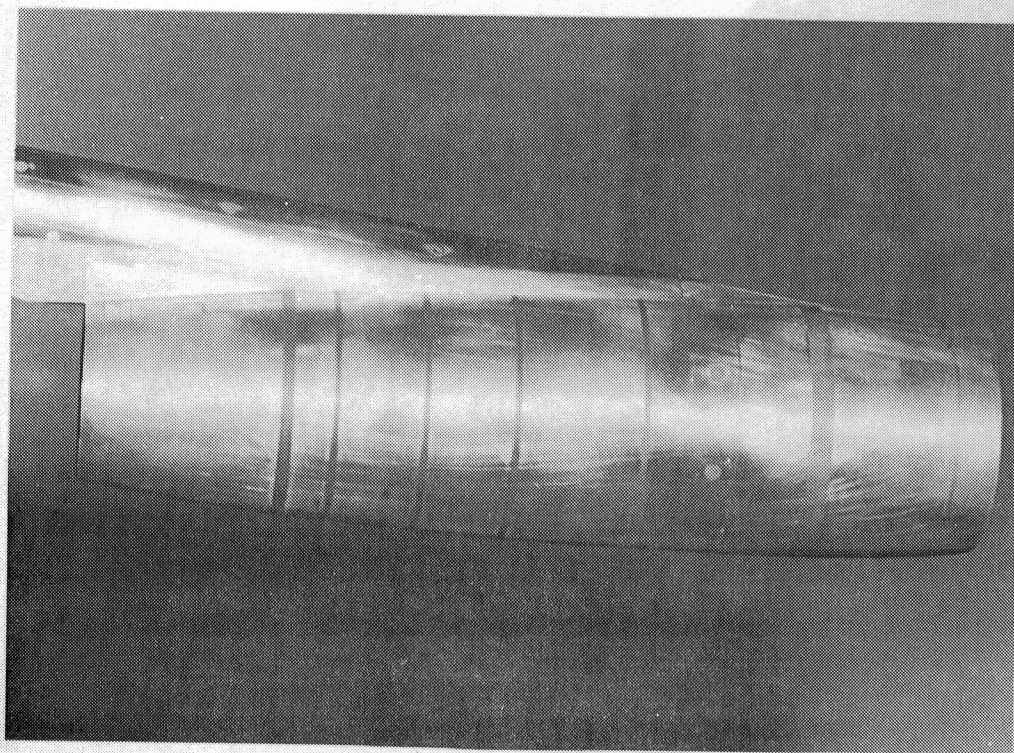
NASA
L-74-3582

(a) Configuration 1.

Figure 2. - Photographs of model.



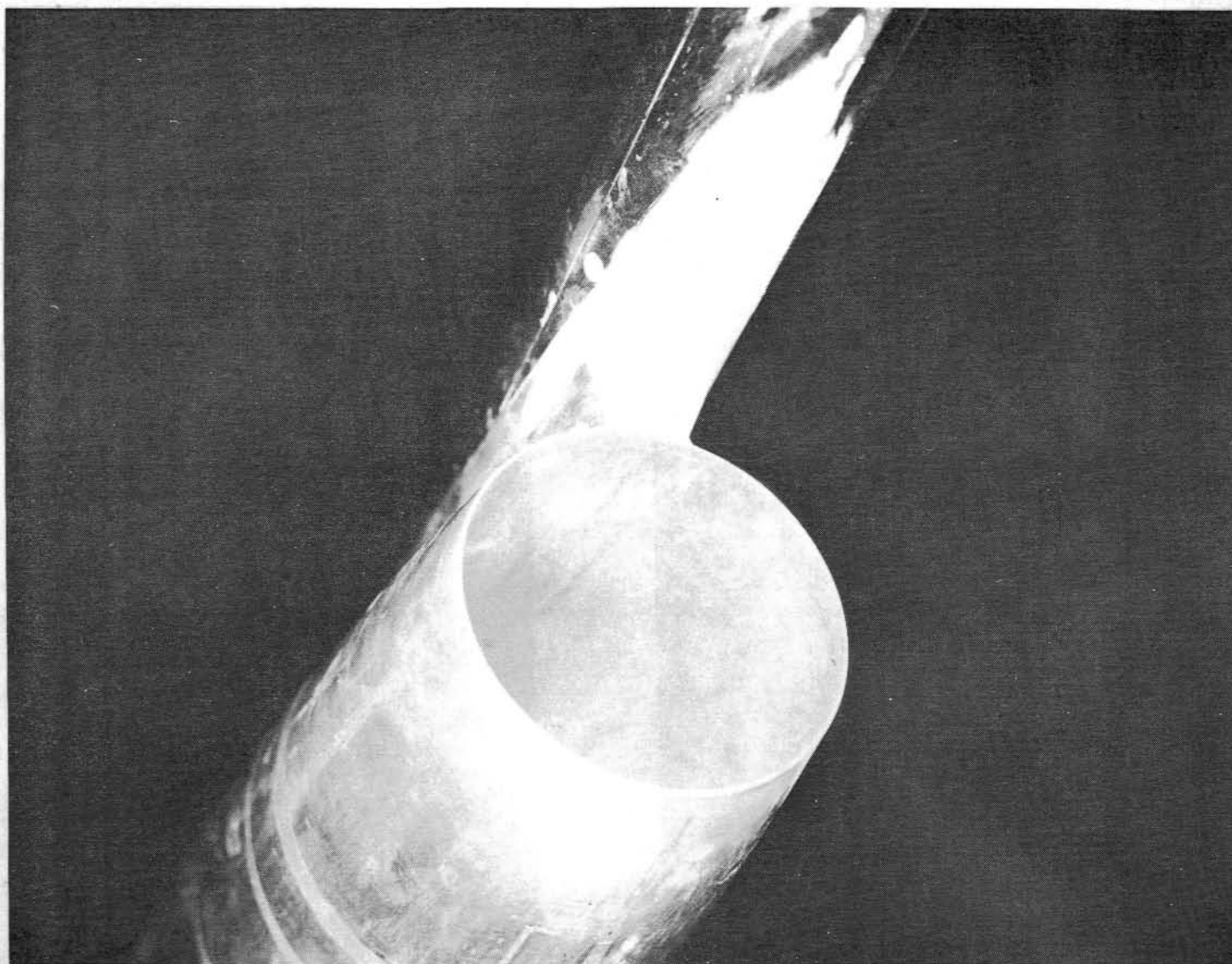
NASA
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NASA
L-74-3561

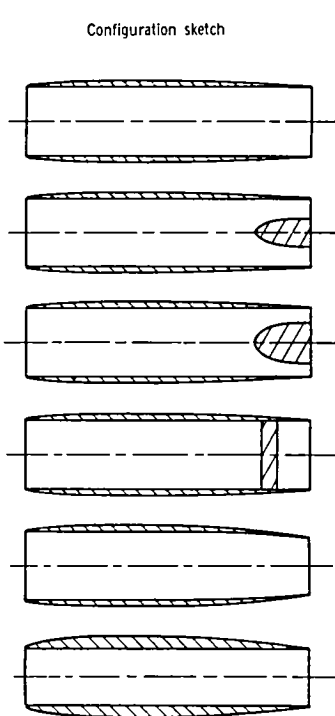
(b) Configuration 5.

Figure 2, ~ Continued.



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L-74-3562

(c) Configuration 5.
Figure 2, - Concluded.



Configuration	Inlet	d_h/d_e	d_e/d_m	d_b/d_m	d_p/d_m	R/d_m	β , deg	β_c , deg	R_i/d_m	$\frac{d_e^2 - d_p^2}{d_f^2}$
1	NACA 1-85-100	1.004	0.850	0.859	0	28.382	4.04	2.02	∞	1.0000
2	NACA 1-85-100	1.004	.850	.859	.341	28.382	4.04	2.02	∞	.8482
3	NACA 1-85-100	1.004	.850	.859	.482	28.382	4.04	2.02	∞	.6782
4	NACA 1-85-100	1.004	.850	.859	.850	28.382	4.04	2.02	∞	0
5	NACA 1-85-100	1.220	.700	.709	0	13.813	8.32	4.16	26.704	.6782
6	NACA 1-70-100	1.010	.700	.709	0	13.813	8.32	4.16	∞	1.000

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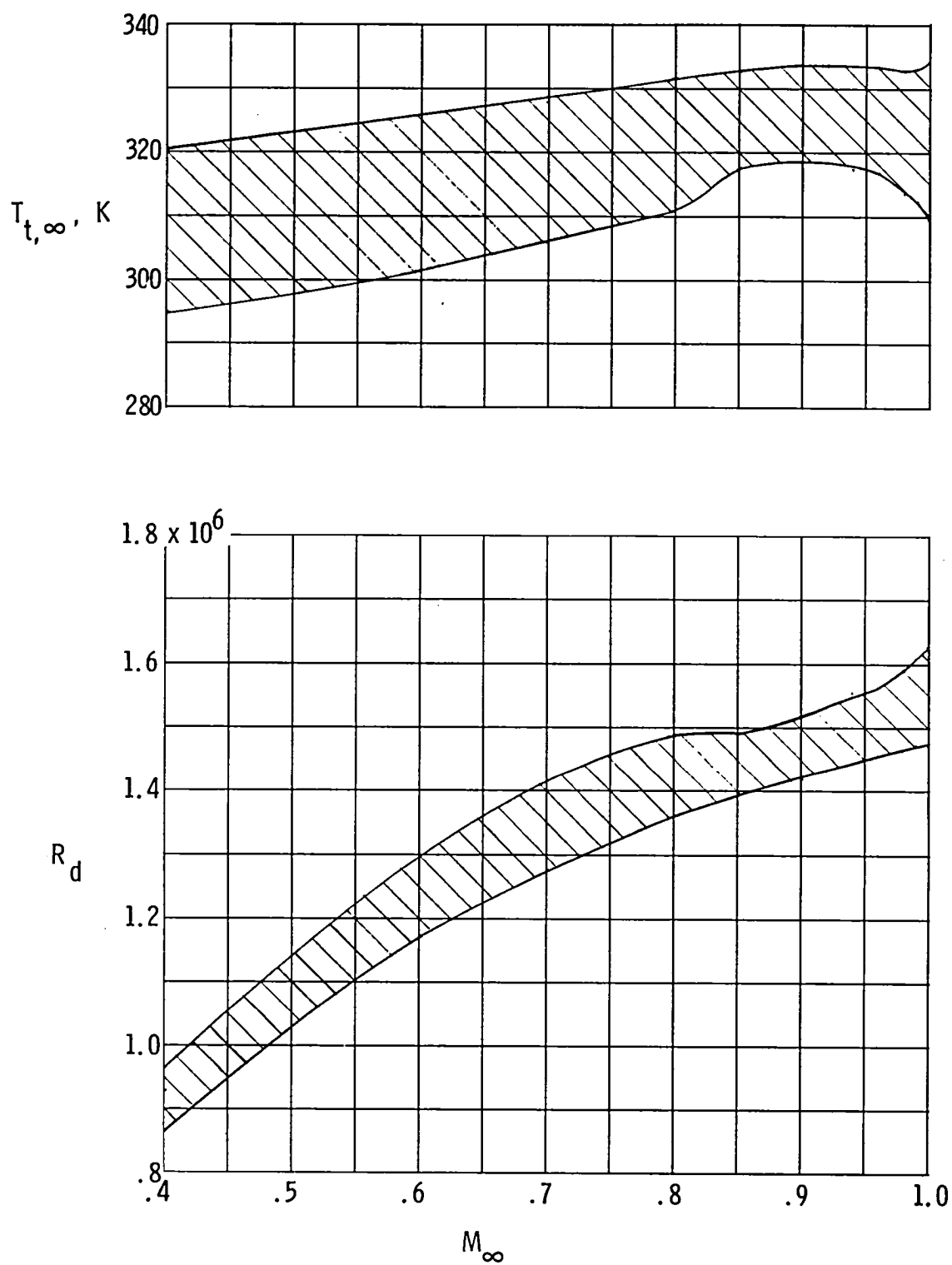


Figure 4. - Variation of Reynolds number (based on nacelle maximum diameter) and stagnation temperature with free-stream Mach number.

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4. Title and Subtitle TABULATIONS OF STATIC PRESSURE COEFFICIENTS ON THE SURFACES OF THREE PYLON-MOUNTED AXISYMMETRIC FLOW-THROUGH NACELLES AT MACH NUMBERS FROM 0.40 TO 0.98				5. Report Date September 1982	
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15. Supplementary Notes					
16. Abstract Three flow-through nacelles mounted on an 82° swept pylon (10-percent thickness-to-chord ratio) were tested in the Langley 16-Foot Transonic Tunnel. The long uncambered pylon was supported from a small body of revolution so that pressure measurements on the nacelle and pylon represent a pylon-nacelle flow field without a wing present. Two nacelles had NACA 1-85-100 inlets and different circular arc afterbodies. The third nacelle had an NACA 1-70-100 inlet with a circular arc afterbody having the same external shape as one of the other nacelles. Nacelle length-to-maximum diameter ratio was 3.5. Data were obtained at angles of attack from -2° to 8° at selected Mach numbers.					
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